

DIVISION I – GENERAL PROVISIONS

SPECIAL PROVISION COPIED NOTES (SPCNs), SPECIAL PROVISION (SPs) and SUPPLEMENTAL SPECIFICATIONS (SSs)

VDOT web file users (“pdf”) may obtain more information and other resources by downloading the accompanying “zip” file (compressed WORD® files).

<http://www.virginiadot.org/business/resources/const/07ImpRev.zip>

These sheets may also be found at the following locations:

Global Web Access: <http://www.virginiadot.org/business/const/spec-default.asp>

VDOT Only Access: http://insidevdot/sites/SanC/specs/2007specs/2007_Standard_Specifications/Forms/AllItems.aspx

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——STANDARD 100 SERIES SPECIAL PROVISION COPIED NOTES (SPCNs)——

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GUIDELINES — ALL IMPERIAL UNIT PROJECTS ONLY.**(c100ai02-0609) GENERAL PROJECT REQUIREMENTS, SUPPLEMENTAL SPECIFICATIONS (SSs), SPECIAL PROVISIONS (SPs) AND SPECIAL PROVISION COPIED NOTES (SPCNs)**

This project shall be constructed in accordance with: the plans; the *Virginia Department of Transportation Road and Bridge Specifications*, dated 2007; and the *Virginia Department of Transportation Road and Bridge Standards*, dated 2008; the *Virginia Work Area Protection Manual*, dated May 1, 2005; the 2003 edition of the *MUTCD*; and Supplemental Specifications, Special Provisions and Special Provision Copied Notes in this contract.

Special Provision Copied Notes in this contract are designated with “(SPCN)” after the date.

The information enclosed in parenthesis “()” at the left of each Special Provision Copied Note in this contract is file reference information for Department use only. The information in the upper left corner above the title of each Supplemental Specification and Special Provision in this contract is file reference information for Department use only.

The Department has identified the system of measurement to be used on this particular project as imperial. Any imperial unit of measure in this contract with an accompanying expression in a metric unit shall be referred to hereinafter as a “dual unit” measurement. Such a “dual unit” measurement is typically expressed first in the imperial unit followed immediately to the right by the metric unit in parenthesis “()” or brackets “[]” where parenthesis is used in the sentence to convey other information. Where a “dual unit” of measure appears in this project, only the imperial unit shall apply. The accompanying metric unit shown is not to be considered interchangeable and mathematically convertible to the imperial unit and shall not be used as an alternate or conflicting measurement.

3-5-09c (SPCN)

GUIDELINES — ALL METRIC UNIT PROJECTS ONLY. END USE WITH THE JUNE 2010 ADVERTISEMENT. THE SUPPLEMENTAL SPECIFICATION SSMCON00 Imperial to Metric Convert (Metric) MUST BE INCLUDED WITH THIS SPCN.**(c100am00-0409) GENERAL PROJECT REQUIREMENTS, SUPPLEMENTAL SPECIFICATIONS (SSs), SPECIAL PROVISIONS (SPs) AND SPECIAL PROVISION COPIED NOTES (SPCNs)**

This project shall be constructed in accordance with: the plans; the *Virginia Department of Transportation Road and Bridge Specifications*, dated 2007; and *1996 Road and Bridge Standards*, the *Virginia Work Area Protection Manual*, dated May 1, 2005; the 2003 edition of the *MUTCD*; and Supplemental Specifications, Special Provisions and Special Provision Copied Notes in this contract.

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Special Provision Copied Notes in this contract are designated with "(SPCN)" after the date.

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The Department has identified the system of measurement to be used on this particular project as metric. The provisions of the Supplemental Specification for "**IMPERIAL UNIT TO METRIC UNIT CONVERSION**" in this contract shall apply to this project.

11-18-08 (SPCN)

GUIDELINES — ALL METRIC UNIT PROJECTS ONLY. BEGIN USE WITH THE JULY 2010 ADVERTISEMENT. THE SUPPLEMENTAL SPECIFICATION SSMCON01 Imperial to Metric Convert (Metric) MUST BE INCLUDED WITH THIS SPCN.

(c100am01-0710)

GENERAL PROJECT REQUIREMENTS, SUPPLEMENTAL SPECIFICATIONS (SSs), SPECIAL PROVISIONS (SPs) AND SPECIAL PROVISION COPIED NOTES (SPCNs)

This project shall be constructed in accordance with: the plans; the *Virginia Department of Transportation Road and Bridge Specifications*, dated 2007; and *Virginia Department of Transportation Road and Bridge Standards*, dated 2008, the *Virginia Work Area Protection Manual*, dated May 1, 2005; the 2003 edition of the *MUTCD*; and Supplemental Specifications, Special Provisions and Special Provision Copied Notes in this contract.

Special Provision Copied Notes in this contract are designated with "(SPCN)" after the date.

The information enclosed in parenthesis "(" at the left of each Special Provision Copied Note in this contract is file reference information for Department use only. The information in the upper left corner above the title of each Supplemental Specification and Special Provision in this contract is file reference information for Department use only.

The Department has identified the system of measurement to be used on this particular project as metric. The provisions of the Supplemental Specification for "**IMPERIAL UNIT TO METRIC UNIT CONVERSION**" in this contract shall apply to this project.

1-13-10 (SPCN)

GUIDELINES — ALL PROJECTS. THIS SPCN IS NOT NECESSARY IF SS1D008 General Provisions (Division I-All Proj) IS INCLUDED IN THE PROPOSAL.

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(c100b01-0908) **LABOR**—Contact may be made in advance of the starting date with the Job Service Office of the Virginia Employment Commission at a location near you to secure referral of available qualified workers in all occupational categories. The closest office near you may be obtained from the VEC website at <http://www.vec.virginia.gov>. Click on “VEC Workforce Centers”.

8-6-08c (SPCN)

GUIDELINES — PROJECTS REQUIRING COORDINATION BETWEEN STATE FORCES AND CONTRACT WORK, SUCH AS SEEDING, PAVEMENT MARKING, SIGNALS. DO NOT USE WHEN DEPARTMENT FURNISHES SIGNS.

(c100c00-0708) **OPERATIONS BY STATE FORCES** - The Contractor is hereby advised that State Forces will furnish materials for and perform certain items of work, indicated on the plans to be performed by State Forces, throughout the life of this contract. The Department will perform its operations in such a manner as to minimize interference with the Contractor's operations, and the Contractor shall coordinate his activities with the Department in order to prevent unnecessary interference.

In the event the plans provide for seeding operations to be performed by State Forces, such operations will include areas used for stockpiling of topsoil, approved borrow pits and waste areas and will include Department furnished and applied lime, fertilizer, seed and mulch. The Contractor shall prepare the areas to be seeded in accordance with Section 603.03(b) of the Specifications, the cost of which shall be included in the price bid for other items. The Contractor shall coordinate with and notify the Department at such time as each area is ready for seeding operations; thereafter, the Department will assume the responsibility for completing and maintaining such areas. The Contractor will be responsible for all repairing or replacing of any work damage by his use of improper materials or construction methods or because of any damage inflicted by other than normal construction activities. Such corrective work shall be performed at the Contractor's expense. Areas outside the limits of construction, other than those approved by the Department, which are disturbed by the Contractor, shall be restored and seeded at the Contractor's expense.

8-1-91, Reissued 7-2008 (SPCN)

GUIDELINES — USE ONLY AT THE DIRECTION OF THE STATE CONTRACT ENGINEER ON MULTIPLE PROJECTS THAT REQUIRE VIRTUALLY IDENTICAL SPECIFICATIONS AND ONLY REQUIRE A FEW PROJECT-SPECIFIC SPECIFICATIONS SUCH AS ASPHALT SCHEDULES. THIS SPCN IS USED IN BOTH VOLUME 1 AND VOLUME 2.

(c100fv0-0609) **VOLUME 1 AND 2 CONTRACT DOCUMENTS STATUS** — This contract consists of two “Volumes” of Supplemental Specifications (SSs), Special Provisions (SPs) and Special Provision Copied Notes (SPCNs). Volume 1 is the contract document assembly titled “Bid Proposal and Contract”. Volume 2 is the contract document assembly titled “Separate-Cover Contract Documents”. The SSs, SPs and SPCNs contained in Volume 1 and the accompanying Volume 2 are binding parts of the Contract. Each SS, SP, and SPCN in Volume 1 and Volume 2 shall carry the same status in the Contract as that stated in Section 105.12 of the Specifications.

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11-24-08 (SPCN)

GUIDELINES — USE ONLY AT THE DIRECTION OF THE STATE CONTRACT ENGINEER.

(c100h00-0609) **NOTICE TO PROCEED DATE FOR THIS CONTRACT** — The Notice to Proceed date for this contract shall be **fill-in date** unless otherwise specified elsewhere in the Contract.

10-21-08c (SPCN)

GUIDELINES — FEDERAL-AID PROJECTS USING ARRA FUNDS (STIMULUS).

(c100jr3-0110) **ARRA PROJECT REQUIREMENTS** – The Contractor is advised this project has been identified by the Department for advertisement, award and construction subject to criteria and conditions established under the American Recovery and Reinvestment Act of 2009 (ARRA). Standard Special Provisions and Special Provision Copied Notes used for federal-aid projects will remain the same under this Act with additional requirements as stated herein after.

The following additional requirements will apply to all projects receiving federal funding under the American Recovery and Reinvestment Act of 2009 (ARRA):

The prime Contractor will be required to submit via electronic media (supplied by the Department), the total number of company/firm employees used on the job site, in the project office, in the home office, or teleworked from an alternate location, the number of hours they worked, and the payroll of all persons who performed work on this project for each month of project duration. Payroll includes only wages, and does not include overhead or indirect costs. The prime Contractor also will be required to report the same information stated above with regard to the work performed by all subcontractors used on the job site, in the project office, in the home office, or teleworked from an alternate location, regardless of tier, during the month. This requirement does not apply to material suppliers. The Contractor will be required to file this report, as directed by the Department, no later than the 10th of each month.

The prime Contractor will be required to submit to the Department the total dollar amount paid to DBE firms on this contract for each calendar month of project duration. The Contractor will be required to file this report on Form C-68 with the appropriate District Civil Rights Manager, as directed by the Department, no later than the 5th day of the month for the preceding month's activity.

The reporting criteria will be mandatory upon the Contractor and any subcontractors and must be accomplished within the timeframe(s) and to the full extent requested. Incomplete reporting of requested information will not be tolerated and will be interpreted as failure to meet the requirements of this provision and, therefore, subject to the sanctions contained herein. Failure to meet these requirements will result in the Contractor being disqualified from bidding on any future contracts for a period of 6 months in accordance with

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the provisions of Section 102.08 of the Specifications and any other remedy applicable and available under law.

Section 902 of the American Recovery and Reinvestment Act (ARRA) of 2009 provides the U.S. Comptroller General and his representatives with the authority to:

- (1) to examine any records of the Contractor or any of its subcontractors, or any State or local agency administering such contract, that directly pertain to, and involve transactions relating to, the contract or subcontract; and
- (2) to interview any officer or employee of the Contractor or any of its subcontractors, or of any State or local government agency administering the contract, regarding such transactions.

Accordingly, the Comptroller General and his representatives shall have the authority and rights as provided under Section 902 of the ARRA with respect to this contract, which is funded with funds made available under the ARRA. Section 902 further states that nothing in this section shall be interpreted to limit or restrict in any way any existing authority of the Comptroller General.

Additionally, Section 1515(a) of the ARRA provides authority for any representatives of the U.S. Inspector General to examine any records or interview any employee or officers working on this contract. The Contractor is advised that representatives of the Inspector General have the authority to examine any record and interview any employee or officer of the Contractor, its subcontractors or other firms working on this contract. Section 1515(b) further provides that nothing in this section shall be interpreted to limit or restrict in any way any existing authority of an Inspector General.

State Requirement for ARRA projects

Executive Order 85 (2009) requires that all Contractors (prime) and subcontractors use the Virginia Workforce Connection (VWC) for the recruitment of all jobs created by the American Recovery and Reinvestment Act of 2009 (ARRA). The VWC is the state's official workforce development web site for employer vacancy listings. Attached are VEC instructions for posting jobs to this web site (Attachment A). For assistance from the Virginia Employment Commission (VEC), please call (804) 225-3116 or email at: StimulusJobs@vec.virginia.gov

Accountability for Proper Use of ARRA Funding

ARRA contains built-in measures to detect and prevent waste, fraud, or mismanagement of recovery/stimulus spending. ARRA provides protections for certain individuals who make specified disclosures relating to Recovery Act funds. Any non-federal employer receiving recovery funds is required to post a notice on site (Whistleblowers Rights Protection Poster) of the rights and remedies provided under this section of the Act.

Those protected include employees of non-federal employers receiving recovery funds, including State and local governments, contractors, subcontractors, grantees or professional membership organizations acting in the interest of recovery fund recipients.

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To be protected, the disclosure must be made by the employee to the Recovery Accountability and Transparency Board, an Inspector General, the Comptroller General, a member of Congress, a state or federal regulatory or law enforcement agency, a person with supervisory authority over the employee, a court or grand jury, or the head of a federal agency or his/her representatives.

In addition, the disclosure must involve information that the employee believes is evidence of:

- gross mismanagement of an agency contract or grant relating to recovery funds;
- a gross waste of recovery funds;
- a substantial and specific danger to public health or safety related to the implementation or use of recovery funds;
- an abuse of authority related to the implementation or use of recovery funds; or
- a violation of law, rule, or regulation related to an agency contract or grant awarded or issued relating to recovery funds.

Additional information and poster details are available at:
<http://www.oig.dot.gov/whistleblower-protection>.

2-1-10 (SPCN)

ATTACHMENT A**Executive Order 85 – Job Posting Processes
Commonwealth of Virginia and Stimulus Funded Jobs**

In accordance with Executive Order 85, the Virginia Employment Commission provides the following instructions for posting vacancies to the Virginia Workforce Connection (VWC) for Commonwealth of Virginia jobs and for contractor and sub-recipient job vacancies funded by the American Recovery and Reinvestment Act (ARRA).

Commonwealth of Virginia Job Postings in the Recruitment Management System (RMS)

1. Job vacancies will be automatically imported from RMS into VWC.
2. Executive agencies, colleges and universities who post job vacancies via RMS require no other action to comply with the Executive Order.

Contractors and Sub-recipients receiving ARRA Funds Job Postings Instructions AND Commonwealth of Virginia Job Postings NOT in (RMS)

These employers will access the VWC and enter their ARRA job postings. If the employer does not have a VWC account, one must be created. The account and posting may be created on-line.

- Access the VWC at <https://www.vawc.vec.virginia.gov>

If you have a VWC account:

- Enter your user ID and password.
- Click the **Sign In** button.

Post a Job Order	<ul style="list-style-type: none"> • Click Manage Jobs from the Quick Menu. • Click Create a New Job Order. • Select the occupation for the job order and click Continue. • Select job order Location and Contact. • Select and confirm the required skills. • Record job order details. • Click Save. • On existing job orders, click the job order title to view and modify it. • Click Copy to create a copy of the current job order.
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If you do not have a VWC account:

- Click the Not Registered? Link.
- Click Register, Click Employer.
- Create a unique user ID and password.
- Fill in required (*) fields.
- Click the **Post a Job** button; answer the Stimulus question as noted in the box above.

For assistance from the VEC, please call (804) 225-3116 or email at StimulusJobs@vec.virginia.gov

GUIDELINES - ALL LOCALLY ADMINISTERED PROJECTS.**(c100II0-0609) VDOT SUPPLEMENTAL SPECIFICATIONS (SSs), SPECIAL PROVISIONS (SPs) AND SPECIAL PROVISION COPIED NOTES (SPCNs)**

Where Virginia Department of Transportation (VDOT) Supplemental Specifications, Special Provisions and Special Provision Copied Notes are used in this contract, the references therein to "the Specifications" shall refer to the *Virginia Department of Transportation Road and Bridge Specifications*, dated 2007 for both imperial and metric unit projects. References to the "Road and Bridge Standard(s)" shall refer to the *Virginia Department of Transportation Road and Bridge Standards*, dated 2008 for imperial unit projects and the *1996 Road and Bridge Standards* for metric unit projects. References to the "Virginia Work Area Protection Manual" shall refer to the *Virginia Work Area Protection Manual*, dated May 1, 2005 for imperial and metric unit projects.

Where the terms "Department", "Engineer" and "Contract Engineer" appear in VDOT Supplemental Specifications, Special Provisions and Special Provision Copied Notes used in this contract and the VDOT publication(s) that each references, the authority identified shall be in accordance with the definitions in Section 101.02 of the *Virginia Department of Transportation Road and Bridge Specifications*, dated 2007. Authority identified otherwise for this particular project will be stated elsewhere in this contract.

VDOT Supplemental Specifications, Special Provisions and Special Provision Copied Notes used in this contract and the VDOT publication(s) that each reference are intended to be complementary to the each other. In case of a discrepancy, the order of priority stated in Section 105.12 of the *Virginia Department of Transportation Road and Bridge Specifications*, dated 2007 shall apply.

VDOT Special Provision Copied Notes in this contract are designated with "(SPCN)" after the date of each document. VDOT Supplemental Specifications and Special Provision Copied Notes in this contract are designated as such above the title of each document.

The information enclosed in parenthesis "()" at the left of each VDOT Special Provision Copied Note in this contract is file reference information for VDOT use only. The information in the upper left corner above the title of each VDOT Supplemental Specification and VDOT Special Provision in this contract is file reference information for VDOT use only.

The system of measurement to be used in this project is stated elsewhere in this contract. VDOT Supplemental Specifications, Special Provisions and Special Provision Copied Notes containing imperial units of measure with accompanying expressions in metric units shall be referred to hereinafter as "dual unit measurement" documents. Such a "dual unit measurement" is typically expressed first in the imperial unit followed immediately to the right by the metric unit in parenthesis "()" or brackets "[]" where parenthesis is used in the sentence to convey other information. Where a "dual unit measurement" appears in VDOT documents, the unit that applies shall be in accordance with the system of measurement as stated elsewhere in this contract. The unit shown that is not of the declared unit of measurement is not to be considered interchangeable and mathematically convertible to the declared unit and shall not be used as an

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alternate or conflicting measurement. Where VDOT Specifications are used for metric unit projects and only imperial units of measurement appear the document, the provision(s) in this contract for imperial unit to metric unit conversion shall apply.

5-20-09 (SPCN)

GUIDELINES — USE ONLY ON PROJECTS THAT EMPLOY THE VOLUME 1 AND METHOD OF CREATING A PROPOSAL. THIS SPCN IS USED ONLY IN VOLUME 1.

(c100mv1-1109)

AMENDMENTS TO VOLUME 2 OF THIS CONTRACT — The Supplemental Specifications (SSs), Special Provisions (SPs) and Special Provision Copied Notes (SPCNs) contained in the accompanying contract document assembly titled “Separate-Cover Contract Documents” are amended for this project. The provisions of this Special Provision Copied Note (SPCN) are written specifically to modify, by amendment, the “Separate-Cover Contract Documents” assembly for this project. Such amendments are as follows:

The Special Provision for **ASPHALT SURFACE TREATMENT (Maintenance)** dated August 25, 2008 is amended to replace the fourth paragraph (**Brooming**) under section **VI. MEASUREMENT AND PAYMENT** with the following:

Brooming shall be included in the price bid for other appropriate items.

The Special Provision for **MACRO-TEXTURE SURFACE TREATMENT (Maintenance)** dated August 25, 2008 is amended to replace the second paragraph (**Sweeping**) under section **VIII. MEASUREMENT AND PAYMENT** with the following:

Sweeping shall be included in the price bid for other appropriate items.

11-6-09c (SPCN)

GUIDELINES — USE ONLY ON SLURRY OR LATEX PROJECTS THAT EMPLOY THE VOLUME 1 AND METHOD OF CREATING A PROPOSAL. THIS SPCN IS USED ONLY IN VOLUME 1.

(c100nv0-1109)

AMENDMENTS TO VOLUME 2 OF THIS CONTRACT — The Supplemental Specifications (SSs), Special Provisions (SPs) and Special Provision Copied Notes (SPCNs) contained in the accompanying contract document assembly titled “Separate-Cover Contract Documents” are amended for this project. The provisions of this Special Provision Copied Note (SPCN) are written specifically to modify, by amendment, the “Separate-Cover Contract Documents” assembly for this project. Such amendments are as follows:

The Special Provision for **EMULSIFIED ASPHALT SLURRY SEAL (Maintenance)** dated June 1, 2009 is amended to delete the second paragraph (**vegetation removal**) under section **V. MEASUREMENT AND PAYMENT**.

The Special Provision for **LATEX MODIFIED EMULSION TREATMENT (MICRO-SURFACING) (Maintenance)** dated August 27, 2008 is amended to delete the fourth paragraph (**vegetation removal**) under section **VI. MEASUREMENT AND PAYMENT**.

11-2-09 (SPCN)

GUIDELINES — USE ONLY ON PROJECTS THAT EMPLOY THE VOLUME 1 AND METHOD OF CREATING A PROPOSAL. THIS SPCN IS USED ONLY IN VOLUME 1.

(c100ov0-1209)

AMENDMENTS TO VOLUME 2 OF THIS CONTRACT — The Supplemental Specifications (SSs), Special Provisions (SPs) and Special Provision Copied Notes (SPCNs) contained in the accompanying contract document assembly titled “Separate-Cover Contract Documents” are amended for this project. The provisions of this Special Provision Copied Note (SPCN) are written specifically to modify, by amendment, the “Separate-Cover Contract Documents” assembly for this project. Such amendments are as follows:

The Supplemental Specification for **SECTION 515—PLANING OR MILLING PAVEMENT** dated December 13, 2009 is amended to replace the **Pay Items** and **Pay Units** of Section **515.05—MEASUREMENT AND PAYMENT** with the following:

Pay Item	Pay Unit
Flexible pavement planing (0-2” depth)	Square yard
Flexible pavement planing (Above 2”-4” depth)	Square yard
Flexible pavement tie-in planing (0-2” depth)	Square yard
Flexible pavement tie-in planing (Above 2”-4” depth)	Square yard
Flexible pavement planing (over 4” depth)	Square yard
Rigid pavement planing (0-2” depth)	Square yard
Rigid pavement tie-in planing (0-2” depth)	Square yard

1-13-10 (SPCN)

GUIDELINES — PROJECTS WHERE PREQUALIFICATION REQUIREMENTS ARE WAIVED BY THE STATE CONTRACT ENGINEER.

(c102b01-0609) **PREQUALIFICATION WAIVED** - The Contractor is advised that the provisions of Section 102 of the Specifications requiring Prequalification are waived on this contract.

3-17-09 (SPCN)

GUIDELINES — PROJECTS ADVERTISED FOR 3 WEEKS OR LESS.

*These SPECIFICATIONS REVISIONS are subject to change on short notice.

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(c102d00-0708) **SECTION 102.04(c) NOTICE OF ALLEGED AMBIGUITIES** of the Specifications is amended to replace the first sentence of the first paragraph with the following:

In the event a word, phrase, clause, or other portion of the plans, specifications, or other contract documents is alleged to be ambiguous, the Bidder shall submit to the Contract Engineer a written notice of same prior to the date of receipt of bids, and request an interpretation thereof.

1-14-08 (SPCN)

GUIDELINES — NO-PLAN PROJECTS AND WHEN REQUESTED BY THE ENGINEER (SHOWN ON BOTTOM OF LAST PRICE SHEET {VA. CONSTR. REG. NO.}):

(c102lg0-0708) **REQUIRED ATTENDANCE OF PROJECT SHOWING** - Section 102.04(a) of the Specifications is amended to include the following:

Prospective Bidders are hereby advised that attendance of the Project Showing is a prerequisite for submitting a bid proposal for this project. The "Notice of Advertisement for Bids" will designate the date, time and location for showing the work for interested parties. Prospective Bidders shall register in writing with the Engineer at the Project Showing and all attending parties will be noted in the Project Showing letter. Failure on the part of the Prospective Bidder to attend the Project Showing for this project and to register with the Engineer will be cause for rejection of the Bidder's proposal.

1-14-08 (SPCN)

GUIDELINES — MAINTENANCE SCHEDULE PROJECTS ONLY.

(c102mm0-0609) **SECTION 102.05—PREPARATION OF BID** of the Specifications is amended to include the following:

The Bidder may bid on one or more individual contract schedule. The Bidder shall submit average unit prices in a contract schedule. Each contract schedule will be awarded and administered as a separate contract.

10-21-08 (SPCN)

GUIDELINES — ON-CALL PROJECTS ONLY. NOTIFY THE STATE CONTRACT ENGINEER WHEN USING THIS SPCN.

(c103gg0-0708) **SECTION 103.06(e) PROGRESS SCHEDULE** - The provision of Section 103.06(e) of the Specifications requiring the submission of a progress schedule will not apply to this contract.

8-1-91, Reissued 7-2008 (SPCN)

*These SPECIFICATIONS REVISIONS are subject to change on short notice.

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GUIDELINES — MAINTENANCE SCHEDULE PROJECTS ONLY.

(c104cm0-0609) **SECTION 104.01—INTENT OF CONTRACT** of the Specifications is replaced by the following:

The intent of the Contract is to provide for the completion of all work specified therein.

The Contractor shall base his bid on the cost of completing all work specified in the Contract.

Budgetary constraints as deemed necessary by the Department may be imposed at any time during the life of the Contract. This may affect the number of routes paved and thus the final quantity of work to be performed.

If prior to initiating or during the performance of the work, the Engineer determines that the cost of completion of all work specified in the Contract will exceed the limits of the budgeted funds, the Contractor will be notified immediately. With such notice the Engineer will specify which routes will be deleted according to the Department's predetermined listing of priorities.

If after routes are deleted and work proceeds, budgets revisions indicate that the cost of work to be completed by the Contractor will fall below the limits of the budgeted funds, the Department will determine which of the previously deleted routes will be returned to the Schedule to be completed at the contract unit price.

10-21-08 (SPCN)

GUIDELINES — PROJECTS DESIGNED UNDER THE NO-PLAN CONCEPT WHERE MINOR CONSTRUCTION SURVEYING IS REQUIRED. THE DISTRICT SURVEY MANAGER'S APPROVAL MUST BE ACQUIRED PRIOR TO INCLUDING THIS SPCN IN THE CONTRACT.

(c105ag0-0708) **NO PLAN PROJECT CONSTRUCTION SURVEYING**—Construction surveying for this project shall be in accordance with the following:

Section 105.13 State Force Construction Surveying is replaced by the following:

The location of any reference points which may have been established by the Department and any control data which the Department may have will be made available to the Contractor upon request. The Department will be responsible for the accuracy of such reference points and control data.

Section 517—Contractor Construction Surveying is replaced by the following:

The Contractor shall perform all construction and other surveying which the Contractor deems necessary to construct this project in accordance with the Contract documents. The cost for all surveying performed by the Contractor shall be included in the price bid for other items in the Contract.

*These SPECIFICATIONS REVISIONS are subject to change on short notice.

4-10-08 (SPCN)

GUIDELINES — ALL FEDERALLY FUNDED PROJECTS:

(c105hf1-0309) **SECTION 105.06 SUBCONTRACTING** of the Specifications is amended to include the following:

Any distribution of work shall be evidenced by a written binding agreement on file at the project site. Where no field office exists, such agreement shall be readily available upon request to Department inspector(s) assigned to the project.

The provisions contained in Form FHWA-1273 specifically, and other federal provisions included with the prime Contract are generally applicable to all Federal-aid construction projects and must be made a part of, and physically incorporated into all contracts, as well as, appropriate subcontracts for work so as to be binding in those agreements.

12-19-08 (SPCN)

GUIDELINES — ALL STATE FUNDED PROJECTS ONLY:

(c105is1-0908) **SECTION 105.06 SUBCONTRACTING** of the Specifications is amended to replace the first paragraph with the following:

No portion of the Contract shall be subcontracted or otherwise disposed of without the written consent of the Engineer, except for work that is \$25,000 or less per subcontractor, where the cumulative total of the sublets not requiring the Engineer's written consent will not exceed 10 percent of the original contract value. This will not, however, waive the requirements for prequalification, and will be considered part of the percentage the Contractor is allowed to subcontract. The Contractor shall notify the Engineer of the name of the firm to whom the work will be subcontracted, and the amount and items of work involved. Such notification shall be made and verbal approval given by the Engineer prior to the subcontractor beginning work.

5-15-08 (SPCN)

GUIDELINES — PROJECTS REQUIRING DETOURS IN MUNICIPALITIES ONLY:

(c105j00-0708) **SECTION 105.14(a) DETOURS** of the Specifications is replaced by the following:

(a) **Detours:** Detours may be indicated on the plans or in the special provisions or used with the approval of the Engineer. Detours over existing off-project roadways will be designated and the roadways maintained by the Department except municipalities shall be responsible for roadway maintenance within their own corporate limits. Temporary directional sign panels for off-project detours will be furnished by the Department. Responsibility for installation and

maintenance of the temporary directional sign panels shall be in accordance with Section 512.03(a) of the Specifications.

If any project is located wholly or in part within the corporate limits of a municipality and through traffic is to be detoured at the request of the municipality, the municipality will:

1. Provide and maintain the detours within the corporate limits
2. Furnish, install and maintain the temporary directional sign panels

The provision of detours and signing of alternate routes will not relieve the Contractor of the responsibility of ensuring the safety of the public or from complying with any requirements of these specifications affecting the rights of the public, including those concerning lights and barricades. Maintenance of all other detours shall be the responsibility of the Contractor.

Right of way for temporary highways or bridges required by these provisions will be furnished by the Department.

1-14-08 (SPCN)

GUIDELINES — MINIMUM-PLAN AND NO PLAN PROJECTS REQUIRING EXCAVATION, EMBANKMENT and/or AGGREGATE.

(c106fp0-0609) **SECTION 106.03(b) SOURCES FURNISHED BY THE CONTRACTOR** of the Specifications is replaced by the following:

- (b) **Sources Furnished by the Contractor:** The use of material from sources furnished by the Contractor will not be permitted until approved by the Engineer and written authority is issued for the use thereof.

The Contractor shall acquire the necessary rights to take material from these sources and shall pay all costs related thereto, including costs which may result from an increase in length of haul. The Department will review and evaluate the material and reserves the right to reject any material from a previously approved source which fails visual examination or test.

1-14-08 (SPCN)

GUIDELINES — STATE FUNDED PROJECTS LESS THAN \$250,000.

(c107fg0-0708) **SECTION 107.13(b) LABOR RATE FORMS** of the Specifications is amended by the following:

The Contractor is advised that labor rate forms will not apply to this contract.

1-14-08 (SPCN)

GUIDELINES — FOR PROJECTS WITH MOBILE OPERATIONS SUCH AS ASPHALT MAINTENANCE SCHEDULE PROJECTS.

(c107gm0-0609) **SECTION 107.21—SIZE AND WEIGHT LIMITATIONS** - The Special Provision in this contract for **SUPPLEMENTAL DIVISION I—GENERAL PROVISIONS** is amended to replace **Section 107.21—Size and Weight Limitations** of that Special Provision with the following:

SECTION 107.21—SIZE AND WEIGHT LIMITATIONS of the Specifications is amended to add the following:

- (d) **Construction Loading of Structures:** In the course of planning and prosecuting the work for the asphalt maintenance schedules in the Contract, the Contractor shall consider the size and weight limitation of any existing structure(s) affecting the prosecuting the work in a schedule when contemplating construction loads, equipment access, haul and delivery routes of materials, and other related activities. If the size or weight limitation of an existing structure changes after the receipt of bid date for the Contract and remains so up to and including the actual prosecution of work for a schedule in the Contract, preventing or limiting access across the structure, and the Contractor determines this limitation impacts his operations; he shall notify the Engineer of such change. If the Engineer confirms such change has occurred, the change will be considered a change to the character of the work in accordance with the provisions of Section 104.03(a) of the Specifications and is eligible for adjustments in accordance with the provisions therein.

10-21-08 (SPCN)

GUIDELINES — FOR PROJECTS SELECTED BY THE DISTRICT CONSTRUCTION ENGINEER. THIS SPCN IS ONLY USED WHEN LIQUIDATED DAMAGES ARE DIFFERENT THAN THOSE STATED IN SECTION 108.06(b) AND/OR WHEN INCENTIVE APPLIES. THE DOLLAR AMOUNT FOR EACH CALENDAR DAY BEYOND THE TIME LIMIT AND/OR INCENTIVE "(\$fill-in amount)" MUST BE FILLED IN, OTHERWISE NO LIQUIDATED DAMAGES AND/OR INCENTIVE APPLIES.

(c108eg0-0708) **SECTION 108.06(b) LIQUIDATED DAMAGES** of the Specifications is replaced by the following:

All work for this Contract shall be completed and accepted on or before the time limit established in the Contract. In the event the Contractor fails to complete the work by the time limit, liquidated damages, representing the estimated additional cost of administration, engineering, supervision, inspection and other expenses will be assessed in the amount of \$ fill-in amount for each calendar day beyond the time limit, including Sundays and Holidays, that the project is not completed.

Incentive: In the event the Contractor completes all work and the project is accepted prior to the time limit in the Contract, the Contractor will be paid an amount of \$ fill-in amount as an incentive for each calendar day of unused time prior to the time limit, including Sundays and Holidays. The amount paid as an incentive will not exceed \$ fill-in amount. Time extensions will not be considered when computing the incentive.

1-14-08 (SPCN)

GUIDELINES — FOR PROJECTS SELECTED BY THE DISTRICT CONSTRUCTION ENGINEER. THIS COPIED NOTE IS ONLY USED WHEN LIQUIDATED DAMAGES ARE DIFFERENT THAN THOSE STATED IN .THE DOLLAR AMOUNT FOR EACH CALENDAR DAY BEYOND THE TIME LIMIT "(\$fill-in amount)" MUST BE FILLED IN, OTHERWISE NO LIQUIDATED DAMAGES APPLY.

(c108lg0-0708) **SECTION 108.06(b) LIQUIDATED DAMAGES** of the Specifications is replaced by the following:

All work for this Contract shall be completed and accepted on or before the time limit established in the Contract. In the event the Contractor fails to complete the work by the time limit, liquidated damages, representing the estimated additional cost of administration, engineering, supervision, inspection and other expenses will be charged against the Contractor in the amount of \$fill-in amount for each calendar day beyond the time limit, including Sundays and Holidays, in which the Contract remains in an incomplete state.

1-14-08 (SPCN)

GUIDELINES — ASPHALT MAINTENANCE SCHEDULE PROJECTS ONLY.

(c108mm0-0609) **SECTION 108.01—PROSECUTION OF WORK** is amended to add the following:

Once the Contractor has begun work on a given schedule or portion thereof he shall endeavor to prosecute such work fully and continuously in accordance with the details and requirements of the Contract to its completion. In the event the Contractor has to temporarily suspend the work on a given schedule or portion thereof he shall notify the Engineer at least 24 hours in advance of the time and date he plans to pull off the work site. Prior to leaving the work site, the Contractor shall ensure the work site has been properly and safely secured to protect the traveling public in accordance with the provisions of the *Virginia Work Area Protection Manual*, the *MUTCD*, the Special Provision for **SECTION 512—MAINTAINING TRAFFIC (Asphalt Maintenance Schedules)** including the drawings therein, the Contract documents, and other paving or planning/milling requirements included in the Contract documents.

10-21-08 (SPCN)

GUIDELINES — ASPHALT MAINTENANCE SCHEDULE PROJECTS OR OTHER PROJECTS WHERE THE PROJECT MANAGER DETERMINES IT IS NECESSARY TO RESTRICT LANE CLOSURES FOR AN ADDITIONAL HALF DAY BEFORE AND AFTER A HOLIDAY.

(c108n00-0210) **SECTION 108.02—LIMITATION OF OPERATIONS** of the Specifications is replaced with the following:

(a) **General**

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The Contractor shall conduct the work in a manner and sequence that will ensure its expeditious completion with the least interference to traffic and shall have due regard for the location of detours and provisions for handling traffic. The Contractor shall not open any work to the prejudice or detriment of work already started. The Engineer may require the Contractor to finish a section of work before work is started on any other section.

The Contractor shall also be governed by the limitations of operations specified herein and elsewhere in the contract documents including but not limited to pavement and shoulder planing operations, pavement and shoulder paving operations, trench widening, shoulder rehabilitation, removal and placement of traffic control items, and maintaining traffic.

The Contractor shall also schedule work, for paving sites designated in the Contract, so that it is completed on or before the dates and time restrictions specified herein or elsewhere in the Contract.

(b) Holidays

Except as is necessary to maintain traffic, work shall not be performed on Sundays or the following holidays without the permission of the Engineer: January 1, Easter, Memorial Day, July 4, Labor Day, Thanksgiving Day, and Christmas Day.

If any of these holidays occurs on a Sunday, the following Monday shall be considered the holiday.

Unless otherwise specified, lane closures will not be permitted after noon (12:00 p.m.) the day before a holiday and will not be permitted again until noon (12:00 p.m.) the day after a holiday. When a holiday falls on a Monday, lane closures will not be permitted after noon (12:00 p.m.) the preceding Friday and when a holiday falls on a Friday, lane closures will not be permitted until noon (12:00 p.m.) the following Monday, unless otherwise approved by the Engineer.

The Contractor shall not leave planed (milled) surfaces unpaved on the Interstate system over holidays. Therefore, the Contractor shall plan and prosecute the work accordingly.

1-14-10 (SPCN)

GUIDELINES — USE ONLY ON PROJECTS REQUIRING PRICE ADJUSTMENT FOR PG 76-22 and PG 70-28 ASPHALT CONCRETE (E MIXES OR MODIFIED D&E MIXES).

(c109g02-1209)

POLYMER MODIFIED (PG 76-22 and PG 70-28) ASPHALT CEMENT ADJUSTMENT - When asphalt concrete mixtures require the use of Performance Graded asphalt cement PG 76-22 or PG 70-28, the Contractor shall show in the space provided on Form C-16A of the electronic bid proposal submitted by the Contractor, the f.o.b. cost per ton for asphalt cement PG 76-22 or PG 70-28 upon which bid items containing PG 76-22 or PG 70-28 were developed.

*These SPECIFICATIONS REVISIONS are subject to change on short notice.

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During the life of the Contract, the Contractor shall document to the Department, by invoice signed by the supplier, his cost for PG 76-22 or PG 70-28 used. The Department will then adjust payments for asphalt concrete containing PG 76-22 or PG 70-28 by the difference in the actual f.o.b. price and the f.o.b. quote submitted with the bid. Adjustments will be made at the time for partial payments for asphalt concrete containing PG 76-22 or PG 70-28 in accordance with the requirements of Section 109.08 of the Specifications.

11-1-09 (SPCN)

GUIDELINES — ASPHALT MAINTENANCE SCHEDULE PROJECTS ONLY.

(c109im0-0609) **SECTION 109.09—PAYMENT FOR MATERIAL ON HAND** of the Specifications is replaced with the following:

No payment for Material on Hand will be made for this contract.

10-21-08 (SPCN)

GUIDELINES – MAINTENANCE SCHEDULE PROJECTS ONLY. USE ONLY WHERE SPECIFIC SCHEDULES ARE NOT ALLOWING FUEL ADJUSTMENT. THIS PROVISION ONLY APPLIES WHEN THE FOLLOWING IS IN THE PROPOSAL: S109F00 Adjustment Option -Fuel.

(c109jm0-1109) **NO FUEL ADJUSTMENT ELIGIBILITY FOR SPECIFIC SCHEDULE ITEMS —** If the fuel adjustment form(s), as required in the special provision for **Optional Adjustment for Fuel**, is not included in the Contract for a specific schedule, the items in that schedule are not eligible for fuel adjustment.

9-3-08 (SPCN)

GUIDELINES – MAINTENANCE SCHEDULE PROJECTS ONLY. USE ONLY WHERE SPECIFIC SCHEDULES ARE NOT STEEL PRICE ADJUSTMENT. THIS PROVISION ONLY APPLIES WHEN THE FOLLOWING IS IN THE PROPOSAL: S109D01 Price Adjustment -Steel.

(c109km0-1209) **NO STEEL PRICE ADJUSTMENT ELIGIBILITY FOR SPECIFIC SCHEDULE ITEMS —** If the steel price adjustment form(s), as required in the special provision for **Price Adjustment For Steel**, is not included in the Contract for a specific schedule, the items in that schedule are not eligible for steel price adjustment.

12-10-09 (SPCN)

——**SELECT USE 100 SERIES SPECIAL PROVISION COPIED NOTES (SPCNs)**——

The following are Select Use Special Provision Copied Notes. None have been through the Department's complete Specifications Committee review/comment/acceptance process and are not part of the Standard Specifications. They are to be considered as project-specific and may be subject to modifications required to meet specific project conditions or requirements for Federal funding. Anyone making modifications is responsible for obtaining the appropriate expertise in the discipline applicable to the modification. If modifications are made the date must also be changed to reflect the current date. Please send a copy of the modified special provision copied note with the new date and specific project number to David.Gayle@VDOT.Virginia.gov so it may be added to the Specifications Stockpile.

cu105000a Work Zone Traff Control Pers Req

GUIDELINES — FOR PROJECTS THAT DO NOT INCLUDE SS1D008 General Provisions (Division I-All Proj) AND SS51202 Maintaining Traffic OR S512LM2 Maint Traffic -Asphalt Maint Sched.

PERSONNEL REQUIREMENTS FOR WORK ZONE TRAFFIC CONTROL - Section 105 and 512 of the Specifications are amended as follows:

Section 105.14—Maintenance During Construction is amended to add the following:

The Contractor shall provide at least one person on the project site during all work operations who is currently verified either by the Department in Intermediate Work Zone Traffic Control, or by the American Traffic Safety Services Association (ATSSA) as a Traffic Control Supervisor (TCS). This person must have the verification card with them while on the project site. This person shall be responsible for the oversight of work zone traffic control within the project limits in compliance with the contract requirements involving the plans, specifications, the VWAPM, and the MUTCD. This person's duties shall include the supervision of the installation, adjustment (if necessary), inspection, maintenance and removal when no longer required of all traffic control devices on the project.

If none of the Contractor's on-site personnel responsible for the supervision of such work has the required verification with them or if they have an outdated verification card showing they are not currently verified either by the Department in Intermediate Work Zone Traffic Control, or by the American Traffic Safety Services Association (ATSSA) as a Traffic Control Supervisor (TCS) all work on the project will be suspended by the Engineer.

The Contractor shall provide at least one person on site who is, at a minimum, verified by the Department in Basic Work Zone Traffic Control for each construction and/or maintenance operation that involves installing, maintaining, or removing work zone traffic control devices. This person shall be responsible for the placement, maintenance and removal of work zone traffic control devices.

In the event none of the Contractor's on-site personnel of any construction/maintenance operation has, at a minimum, the required verification by the Department in Basic Work Zone Traffic Control, that construction/maintenance operation will be suspended by the Engineer until that operation is appropriately staffed in accordance with the requirements herein.

Section 512.03 Procedures is amended to add (r) **Work Zone Traffic Control** as the following:

- (r) **Work Zone Traffic Control:** The Contractor shall provide individuals trained in Work Zone Traffic Control in accordance with the requirements of Section 105.14 of the Specifications.

Section 512.04 Measurement and Payment is amended to add the following:

Basic Work Zone Traffic Control – Separate payment will not be made for providing a person to meet the requirements of Section 105.14 of the Specifications. The cost thereof shall be included in the price of other appropriate pay items.

Intermediate Work Zone Traffic Control - Separate payment will not be made for providing a person to meet the requirements of Section 105.14 of the Specifications. The cost thereof shall be included in the price of other appropriate pay items.

6-11-09a (SPCN)

*These SPECIFICATIONS REVISIONS are subject to change on short notice.

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cu105001a SMA Sched Work Date (Salem).doc**GUIDELINES – ASPHALT MAINTENANCE PROJECTS (SALEM DISTRICT PLANT MIX SCHEDULE WORK ONLY).**

SMA SCHEDULE WORK DATES (Salem District Only) — Section 105.01—Notice To Proceed of the Specifications is amended to include the following:

The Notice to Proceed date for this contract shall be as specified elsewhere in this contract; however, SMA shall not be placed before **June 1, 2010** or after **October 1, 2010** unless otherwise specified elsewhere in the contract documents.

12-2-09a (SPCN)

cu107000a Use of MBE (State Fund Plant Mix)**GUIDELINES – ASPHALT MAINTENANCE PROJECTS (STATE-FUNDED PLANT MIX ONLY).**

USE OF MINORITY BUSINESS ENTERPRISES (MBEs) - In accordance with Section 107.15—Use of Minority Business Enterprises of the Specifications, the Contractor is encouraged to provide opportunities to MBEs to provide services for hauling, placement of pavement markings, traffic control items and any other work operations required by this contract.

5-14-08a (SPCN)

cu107001a Bridge-Tunnel Security (HmpRds)**GUIDELINES – FOR HAMPTON ROADS DISTRICT PROJECTS ONLY INVOLVING OR ADJOINING TUNNELS.**

HAMPTON ROADS BRIDGE TUNNEL SECURITY REQUIREMENTS (Hampton Roads District Only)
— Prior to commencing the work the following is required:

- a. The Engineer will notify the Contractor and will:
 - i. Ensure an *Agreement Establishing a Company Representative*, signed by an officer of the company, is completed by the Contractor prior to commencing work.
 - ii. Coordinate with the VDOT Security and Emergency Management Division (SEMD) staff and the Contractor to determine a mutually agreeable date, time and location for conducting fingerprint-based criminal history background checks (CHBC).
- b. Each employee of the prime Contractor and any subcontractor of the prime Contractor, who will be involved in this project, is required to sign the *CII Non-disclosure Agreement (Individual)* and to pass a fingerprint-based CHBC.
- c. Results of the fingerprint-based CHBC:
 - i. Favorable results of the CHBC are usually available within 24 hours of the time the background check is conducted.

*These SPECIFICATIONS REVISIONS are subject to change on short notice.

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- ii. In the event an employee of the Contractor has a criminal history, official criminal history reports issued by the Virginia State Police are usually available within five business days, though longer delays may ensue.
- iii. Based upon the review of the official criminal history reports issued by the Virginia State Police, VDOT reserves the right to deny issuance of a VDOT Security Clearance and/or a VDOT-issued photo-identification badge to that employee.
- d. An individual employee's failure to successfully pass the fingerprint-based CHBC will not negate the Contract award and the Contractor will be allowed to replace those individuals; however, if key Contractor or subcontractor personnel fail the fingerprint-based CHBC, the Contract may be cancelled.
- e. All costs for the CHBC, estimated to be \$50.00 per individual, will be borne by the prime Contractor and will not be paid separately but the cost thereof shall be included with other appropriate items.
- f. Evidence of current CHBC from Department of Criminal Justice Services (DCJS) is acceptable in lieu of a fingerprint-based CHBC.
- g. A VDOT-issued photo-identification badge is required for each employee of the prime Contractor and any subcontractors of the prime Contractor, who will be involved in this project.
- h. The requirements herein (a through h) will apply to any additional prime Contractor or subcontractor employees or to any proposed replacements, who will be involved in this project during the term of the Contract.

10-2-08a (SPCN)

cu108000a Continuous Prosecution of Work

GUIDELINES – FOR PROJECTS REQUIRING THE CONTRACTOR TO CONTINUOUSLY PERFORM WORK WITHOUT PULLING OFF TO ANOTHER SITE PRIOR TO COMPLETING WORK AT THE ORIGINAL SITE. (USUALLY FOR FEDERALLY FUNDED INTERSTATE).

CONTINUOUS PROSECUTION OF WORK - The Contractor may schedule and perform work on this contract any time within the fixed time limit set forth in the contract; however, work on each route/section shall be continuously prosecuted once started until completion of that particular route/section.

6-20-06a (SPCN)

cu108001a Limits of Operations (NoVa)

GUIDELINES – FOR ASPHALT MAINTENANCE PROJECTS WHEN CALLED FOR BY THE DISTRICT MAINTENANCE ENGINEER (USUALLY NOVA DISTRICT).

LIMITATIONS OF OPERATIONS — The Contractor shall schedule milling and asphalt overlaying operations in such a manner that asphalt overlay operations are performed as quickly as possible after milling operations are performed. Such time period shall not exceed 48 hours for such work on roadways

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designated as traffic group XIV and as designated elsewhere in the Contract; and shall not exceed five consecutive calendar days for such work on all other roadways; or as directed by the Engineer. No milled areas shall be left unpaved from Thursday evening through Sunday evening.

2-12-09a (SPCN)

——**STANDARD 100 SERIES SPs (SPECIAL PROVISIONS)**——

GUIDELINES — ALL METRIC PROJECTS IN WHICH ANY OF THE REVISED STANDARDS THAT ARE REFERENCED IN THE SPECIAL PROVISION APPLY. END USE WITH THE JUNE 2010 ADVERTISEMENT.

S100AM04-0909

VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION FOR
THE 1996 ROAD AND BRIDGE STANDARDS

May 28, 2009

The **1996 ROAD AND BRIDGE STANDARDS** are amended as follows:

SECTION 1300 - TRAFFIC CONTROL

Page 1301.05, Standard LP-2 Offset: Amended to include the following:

POLE LENGTH (meters)	FOUNDATION STANDARD	BOLT CIRCLE DIAMETER	ANCHOR BOLT DIAMETER
A (1.5-5.2)	ST'D. LF-1, TYPE A	300 mm	25 mm
B (5.5-6.7)	ST'D. LF-1, TYPE A	300 mm	25 mm
C (7.0-8.2)	ST'D. LF-1, TYPE A	300 mm	25 mm
D (8.5-9.8)	ST'D. LF-1, TYPE A	300 mm	25 mm
E (10.1-11.5)	ST'D. LF-1, TYPE A	375 mm	25 mm
F (11.6-12.8)	ST'D. LF-1, TYPE A	375 mm	25 mm
G (13.1-14.3)	ST'D. LF-1, TYPE A	375 mm	25 mm
H (14.6-15.8)	ST'D. LF-1, TYPE B	400 mm	25 mm
I (16.2-17.3)	ST'D. LF-1, TYPE B	400 mm	31 mm
J (17.7-18.9)	ST'D. LF-1, TYPE B	400 mm	31 mm

NOTE:

Offset lighting pole length range as shown on plans are approximate and the actual length shall be determined by the Contractor in the field to achieve the required mounting height.

Page 1301.75, Standard SPD-1: Amended to replace all references to 6262-T9 with 6061-T6.

Page 1301.61, Standard SSP-VA: The dimensions for post shape S75x8.5 in the table for Bolt Keeper Plate Data are revised accordingly A = 140 millimeter and B = 114 millimeter.

Pages 1301.45, 1301.47, 1301.48, and 1301.49 are amended to include the following note:

J-Hook wire supports shall be securely attached to the junction box with a bolt and nut with a neoprene washer or an expansion fitting.

*These SPECIFICATIONS REVISIONS are subject to change on short notice.

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All standard drawings: Where applicable replace the reference to 12 mm conduit for ground wire with 25 mm conduit.

Pages 1301.01, 1301.02, 1301.03, 1301.10, 1301.11, 1301.19 and 1301.20 the note:

Voids remaining after conductors exit or enter bell ends or bushings of conduits shall be sealed with silicone to prevent moisture or rodent entry.

is replaced with the following:

Open ends of conduits with conductors installed shall be sealed with an approved soft, pliable and easily removable, waterproof sealant. The sealant shall not have a deleterious effect on cable coverings.

SECTION 1400 - UTILITIES

Page 1411.02, Standard SMH-1 is amended to replace the Flexible Connection note with the following:

Pipe to precast manhole connections shall be made with a flexible boot. The boot shall meet ASTM Specification C-923 and consist of Neoprene Rubber, EPDM Rubber or Polyisoprene Rubber, where preference may be given to a certain material in project specific instances. The internal expansion band to secure the boot in place shall be composed of stainless steel or a non-metallic material. The external band to clamp and seal the boot to the pipe shall be corrosion resistant stainless steel conforming to ASTM Specification A-167. The port to receive the boot shall be core drilled and should be manufactured to allow for lateral and vertical movement. All field installation of pipe thru manhole seal shall be done in accordance with the manufacturer's recommendations and specifications.

GUIDELINES — ALL PROJECTS.**S100B00-0708**

VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION FOR
PROJECT COMMUNICATION AND DECISION MAKING

January 3, 2005c
Reissued July 2008

I. DESCRIPTION

The intent of this provision is to establish procedures, processes and guidelines for making decisions and managing communications regarding work under contract on construction and maintenance projects. The information contained herein is not meant to be all inclusive but to serve as a minimal general framework for promoting efficient and effective communication and decision making at both the project and, if needed, executive administrative level. It is also not meant to override the decision-making processes or timeframes of specific contract requirements.

II. DEFINITIONS

For the purposes of this provision the following terms will apply and be defined as follows:

Submittals – Documents required by the contract that the Contractor must submit for the Department's review, acceptance or approval. These may include shop drawings, working drawings, material test reports, material certifications, project progress schedules, and schedule updates. The Contractor shall produce submittals as early as practicable when required by the contract so as not to delay review and determination of action.

Confirmation of verbal instructions (COVI) - Contractor requested written confirmation of agreements and instructions developed in negotiations with the Department concerning the Work under contract. Agreements must be able to be quantified using existing contract procedures and will, in the vast majority of cases, not impact contract time and cost. When time and/or cost are impacted, they must be clearly spelled out in the COVI.

Requests for information (RFI) – Requests generated by either the Contractor or the Department that the other party supplies information to better understand or clarify a certain aspect of the Work.

Requests for owner action (ROA) – Requests when the Contractor asks that the Department take certain action(s) the Contractor feels is required for proper completion of a portion of the Work or project completion.

Contract change requests (CCR) - Request where the Contractor asks the Department to make an equitable adjustment to the contract because of excusable and/or compensable events, instructions that have or have not been given or other work requiring time and/or cost beyond that specified or envisioned within the original contract.

Requests for contractor action (RCA) – Request generated by the Department where the Department asks the Contractor to take certain action that is in the best interests of the project and/or is required for proper completion of a portion of the Work or for project completion.

Contract change directives (CCD) – Directive by the Department which instructs the Contractor to perform work beyond that specified or envisioned in the original contract and which may specify instructions, time, and cost(s) to make an equitable adjustment to the original contract.

*These SPECIFICATIONS REVISIONS are subject to change on short notice.

Responsible Person – The individual in the normal or escalated resolution process, for either the Contractor or the Department, having the direct authority, responsibility and accountability to formulate and respond to each category of information request.

III. PROCESS FOR DECISION MAKING

Project teams composed on responsible individuals directly involved in the administration, prosecution, and inspection of the Work from the Contractor and the Department shall define and agree upon the field decision-making process during the pre-construction conference. This information relative to the process should be written down and distributed to all parties of the process once it is established. Where there are responsibility, authority or personnel changes associated with this process such changes shall be distributed to all affected parties as quickly as practicable after they are effective so as not to delay or impede this process.

The process for making field decisions with respect to the Work detailed in the contract basically requires the following steps:

1. The Contractor and the Engineer agree on the decision-making process, the identity, authority and accountability of the individuals involved and on the cycle times for response for each category of decision.
2. The party requiring the information generates the appropriate request documents, and calls for a decision from the individual who is accountable for the particular facet of the Work under consideration within the agreed period.
3. The responding party has an internal decision-making process that supports the individual who is accountable and provides the information required within the agreed period for each category of request.
4. The party receiving the decision has an internal process for accepting the decision or referring it for further action within an agreed period of time.

The process also requires that clear and well-understood mechanisms be in place to log and track requests, document the age and status of outstanding requests and actions to be taken on requests that have not been answered within the agreed period.

Both the Department and the Contractor shall agree on the following:

- The documentation and perhaps format to be developed for each category of information requested,
- The name (as opposed to organizational position) of all individuals with the responsibility, authority and accountability to formulate and respond to each category of information requested. The District Administrator (DA) or Chief Executive Officer (CEO) of the Contractor may delegate the responsibility and authority for formulating and responding to requests, however, the accountability for meeting the established response time(s) remains with the District Administrator and CEO.
- The cycle times for each stage in the decision-making process,
- The performance measures to be used to manage the process,
- The action to be taken if cycle times are not achieved and information is not provided in a timely manner.

The following general guideline and timeframe matrix will apply to the various requests for action. Again, please note these guidelines are general in scope and may not apply to specific contract timeframes for response identified within the requirements of the Contract documents. In such cases, specific contract requirements for information shall apply.

PROCESS GUIDELINES FOR REQUESTS GENERATED BY THE CONTRACTOR

Process	Situation	Normal resolution process		Escalated process		Final resolution
		By	Within (calendar days)	By	Within	
Submittal	Where the Contractor requests the Department's review, acceptance or approval of shop drawings, materials data, test reports, project progress schedules, or other submittals required by standard Specifications or other contract language.	Department's Designated Project Manager	<ul style="list-style-type: none"> • Acknowledge: 3 days¹ • Accept or Return: 14 days • Final Determination\Approve: 30 days or as outlined in contract documents. 	DA or their designee*	7 days	Submit ROA or CCR
Confirmation of Verbal Instruction (COVI)	Resolving routine field issues, within the framework of the Contract, in negotiation with Owner field personnel.	Department's Appropriate field personnel	<ul style="list-style-type: none"> • Confirmation: 1 day² 	Submit RFI, ROA or CCR	7 days	(See process for RFI, ROA, or CCR)
Request for Information (RFI)	Requests the Department to supply information to better understand or clarify a certain aspect of the work.	Department's Designated Project Manager	<ul style="list-style-type: none"> • Action: 14 days (or appropriate Action Plan) 	DA or their designee*	7 days	Submit ROA or CCR
Request for Owner Action (ROA)	Requests that the Department take certain action the Contractor feels is required for proper completion of a portion of the Work or project completion.	Department's Designated Project Manager	<ul style="list-style-type: none"> • Acknowledge: 3 days¹ • Action: 14 days (or appropriate Action Plan) 	DA or their designee*	7 days	Submit CCR
Contract Change Request (CCR)	Requests the Department to make an equitable adjustment to the contract because of excusable and/or compensable events, instructions that have or have not been given or other work requiring time and/or cost beyond that specified or envisioned within the original contract.	Department's Designated Project Manager	<ul style="list-style-type: none"> • Acknowledge: 3 days¹ • Action: 30 days (45 days if federal oversight project) 	DA or their designee*	7 days	Established dispute resolution and claims process

¹ Process initiated on the last business day of a week shall be acknowledged before 5 pm on the next VDOT business day.

² The absence of a written confirmation from the Owner to a Contractor's written request for confirmation of a verbal instruction shall constitute confirmation of the verbal instruction.

*These SPECIFICATIONS REVISIONS are subject to change on short notice.

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PROCESS GUIDELINES FOR REQUESTS GENERATED BY THE OWNER

Process	Situation	Normal resolution process		Escalated process		Final resolution
		By	Within (calendar days)	By	Within	
1. RFI	Requests the Contractor to supply information to better understand or clarify a certain aspect of the work. (RFI)	Contractor's Project Superintendent	<ul style="list-style-type: none"> Action: 14 days (or appropriate written Action Plan) 	Contractor's Project Manager	7 days	Submit RCA or CCD
2. RCA	Requesting the Contractor take certain action(s) that is in the best interests of the project and/or is required for proper completion of a portion of the work or for project completion. (RCA)	Contractor's Project Superintendent	<ul style="list-style-type: none"> Response or Action to safety and environmental issues: 1 day Otherwise acknowledge: 3 days¹ Action: 14 days (or appropriate Action Plan) 	Contractor's Project Manager	7 days	Submit CCD
3. CCD	Instructs the Contractor to perform work beyond that specified or envisioned in the original contract and undertakes action(s) to make an equitable adjustment to the contract. (CCD)	Contractor's Project Superintendent	<ul style="list-style-type: none"> Acknowledge: 3 days¹ Action: 30 days 	CEO or their designee**	7 days	Established dispute resolution and termination process

¹ Process initiated on the last business day of a week shall be acknowledged before 5 p m on next project business day.

*These SPECIFICATIONS REVISIONS are subject to change on short notice.

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GUIDELINES — PROJECTS APPROVED BY THE STATE CONTACT ENGINEER AS DUAL DATE CONTRACT PROJECTS ONLY. FEDERALLY FUNDED PROJECTS MAY REQUIRE FHWA REVIEW OF DUAL DATE CONTRACT SPs AND SPCNs BEFORE ADVERTISEMENT.

S100DD0-0708

**VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION FOR
DUAL DATE CONTRACT PROJECTS**

January 14, 2008

SECTION 102.05—PREPARATION OF BID of the Specifications is amended to include the following:

The bidder's attention is directed to the consecutive calendar day and the "no later than" fixed completion dates set forth in the Proposal.

SECTION 103.06—CONTRACT DOCUMENTS of the Specifications is amended to include the following:

The lowest successful bidder may schedule and perform work identified in this proposal at any time within the time limits set forth on Form C-7DD in the proposal. Prior to contract execution, the lowest successful Bidder shall indicate on the Form C-7DD provided by the Department for execution of the Contract, his selected start date for the Work, and, using the number of consecutive calendar days stated in the Proposal, the Department will determine the fixed date for completion and acceptance of the Work. In no case shall the Bidder's determined fixed completion date be beyond the Department's "no later than" fixed completion date set forth in the Proposal.

Once selected, the Contractor's selected start date and determined fixed completion date for the project will be binding.

SECTION 105—CONTROL OF WORK of the Specifications is amended as follows:

Section 105.01—Notice to Proceed is replaced with the following:

For the purposes of this Contract the date the Contractor selects to start the Work will be the Notice to Proceed date. If the Contractor fails to select a start date that is before a date equal to the "no later than" fixed completion date minus the calendar days stated in the Proposal, the Contractor's Notice to Proceed date will automatically become the date resulting from subtracting the consecutive calendar days from the "no later than" fixed completion date stated in the Proposal. In no case shall work begin before the Department executes the Contract.

Section 105.05—Character of Workers, Work Methods, and Equipment is amended to add the following:

The Contractor shall provide the Engineer a list of all equipment available for use on the Contract. The make, model, size, capacity, and year of manufacture shall be listed for each piece of equipment. The list shall be provided at the pre-construction conference or no later than one week prior to the first estimate and shall be updated as changes occur but at least once a month.

SECTION 108—PROSECUTION AND PROGRESS OF WORK of the Specifications is amended as follows:

Section 108.01—Prosecution of Work is amended to replace the first paragraph with the following:

The Contractor shall begin work on his selected start date or no later than 15 consecutive calendar days after his selected start date. Once started, work on this Contract shall be

*These SPECIFICATIONS REVISIONS are subject to change on short notice.

continuously prosecuted and completed no later than the Contractor's determined fixed completion date.

Section 108.04—Determination and Extension of Contract Time Limit is replaced with the following:

No request for an extension of time will be considered that is based on any claim that the time limit as originally established by the Department was inadequate nor will the Department's granting or denying the Contractor's request for an extension of time relieve the Contractor of his responsibility to perform the Work in accordance with the scope and requirements of the Contract unless specifically addressed as an authorized change to the Contract.

If the satisfactory fulfillment of the Contract with extensions and increases authorized in accordance with the requirements of Sections 104.02 and 104.03 of the Specifications requires the performance of work in greater quantities than those specified in the Contract, the Contractor shall inform the Department in writing if the additional quantities require additional time to perform the work and, if so, the reason supporting such a determination and the additional amount of time requested to perform the work due to the greater quantities. The Engineer will determine if additional contract time is warranted by the greater quantities as specified in the Contractor's request. Where the Engineer determines such additional time is warranted, the amount of additional time as well as the additional quantities involved shall be specifically identified in the authorized change order to the Contract.

The Engineer may give consideration for extension of time when a delay occurs due to unforeseen causes beyond the control of and without the fault or negligence of the Contractor. However, consideration will not be given to extensions of time attributable to normal weather conditions or conditions resulting from normal weather.

During prosecution of the work, the Contractor shall identify the causes for any delays attributable to conditions he deems to be beyond his control and shall identify the particular construction operations affected, their criticality to project milestones or overall contract completion, and the significant dates that encompass the periods of delay. The Contractor shall furnish all such information necessary for the Department to make an adequate evaluation of any claim received from the Contractor for an extension of the contract time limit within three days of experiencing such a delay.

Section 108.07—Default of Contract is amended to replace (a) in the first paragraph with the following:

- (a) fails to begin the work under the Contract within 15 consecutive calendar days after the Contractor's selected start date for this Contract.

GUIDELINES — ALL EMERGENCY CONTRACT PROJECTS ONLY.**S100EE0-0708****VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION FOR
EMERGENCY CONTRACT PROJECTS**

January 14, 2008

SECTION 103—AWARD AND EXECUTION OF CONTRACTS of the Specifications is amended as follows:**Section 103.05—Requirements of Contract Bond** is amended to replace the first paragraph, including subparagraphs (a) and (b), with the following:

Within 72 hours after notification of award of the Contract, the successful bidder shall furnish the following bonds for contracts in excess of \$250,000:

- (a) a performance bond in the sum of the Contract amount, conditioned upon the faithful performance of the Contract in strict conformity with the plans, Specifications and conditions of the Contract, and
- (b) a payment bond in the sum of the Contract amount, conditioned upon the prompt payment for all labor, materials, public utility services and rental of equipment used in the prosecution of the work for the Contract.

And to replace the second paragraph with the following:

Bidders will not be awarded an unbonded contract when their bid plus the balance of other unbonded contracts exceeds \$250,000.00 or as otherwise limited by their current prequalification status.

Section 103.06(d) Workers' Compensation Insurance Certificate is amended to replace the first sentence with the following:

The certificate shall be filed on forms furnished by the Department within 72 hours after notification of award of the Contract.

Section 103.06(e) Progress Schedule is replaced with the following:

- (e) **Progress Schedule:** The Contractor is not required to submit a progress schedule for this contract.

Section 103.07—Failure to Furnish Bonds or Certificate of Insurance is amended to replace the first sentence of the first paragraph with the following:

Failure by the successful bidder to furnish the Department acceptable bonds, workers' compensation insurance or the Contractor's Bodily Injury and Property Damage Liability Insurance policy within 72 hours after being notified of the intent of award the Contract shall be considered just cause for cancellation of award and forfeiture of the proposal guaranty.

SECTION 105—CONTROL OF WORK of the Specifications is amended as follows:**Section 105.01—Notice to Proceed** is replaced with the following:

*These SPECIFICATIONS REVISIONS are subject to change on short notice.

Unless otherwise indicated in the Contract, the date of the Notice to Proceed will be the date of contract execution. The State Contract Engineer will contact the Contractor on the date of contract execution to inform him of such action. The State Contract Engineer will confirm this date in the letter of Contract Execution. This letter of Contract Execution will be distributed to Department personnel involved in the administration of the Contract as well as the Contractor.

The Contractor may request to adjust the start date for the work on the Contract. If accepted by the Engineer, such adjustment will not be considered as a basis for claim that the time resulting from Contractor's requested start date is insufficient to accomplish the work nor shall it relieve the Contractor of his responsibility to perform the work in accordance with the scope of work and requirements of the Contract. In no case shall work begin before the Department executes the Contract. The Contractor shall notify the Engineer at least 24 hours prior to the date on which he plans to begin the work.

Section 105.05—Character of Workers, Work Methods, and Equipment is amended to add the following:

The Contractor shall provide the Engineer a list of all equipment available for use on the Contract. The make, model, size, capacity, and year of manufacture shall be listed for each piece of equipment. The list shall be provided at the pre-construction conference or no later than one week prior to the first estimate and shall be updated as changes occur but at least once a month.

SECTION 106—CONTROL OF MATERIAL of the Specifications is amended as follows:

Section 106.01—Source of Supply and Quality Requirements is amended to replace the first paragraph with the following:

The materials used throughout the work shall conform to the requirements of the Contract. The Contractor shall regulate his supplies so that there will be a sufficient quantity of tested material on hand at all times to prevent any delay of work. Except as otherwise specified, materials, equipment, and components shall be new. The Contractor shall file a statement of the known origin, composition and manufacture of all materials to be used in the work, including optional or alternate items. Material requirements not previously reported shall be submitted at least five days prior to their use on the project. The Contractor's statement shall be electronically submitted by use of Form C-25 and shall be identified by the complete project number, and all items or component materials shall be identified by the specific contract item number and the Specification reference shown in the Contract.

And to replace the third sentence of the second paragraph with the following:

The Contractor shall notify the Department of this change, and provide the same identifying information noted in this Section, at least five days prior to their use on the project.

Section 106.02—Material Delivery is amended to delete the first sentence.

SECTION 108—PROSECUTION AND PROGRESS OF WORK of the Specifications is amended as follows:

Section 108.01—Prosecution of Work is amended to replace the first paragraph with the following:

The Contractor shall begin work within 24 hours of the date of the contract execution unless otherwise permitted by specific language in the Contract.

Section 108.03—Progress Schedule General Requirements is replaced with the following:

*These SPECIFICATIONS REVISIONS are subject to change on short notice.

A progress schedule will not be required for this contract.

Section 108.04—Determination and Extension of Contract Time Limit is replaced with the following:

Unless otherwise indicated in the Contract, the contract time limit will be specified as a fixed date for completion. The Contractor shall take into consideration normal conditions considered unfavorable for the prosecution of the work, and shall place sufficient workers and equipment on the project to complete the work in accordance with the specified contract time limit. No request for an extension of time will be considered that is based on any claim that the contract time limit as originally established was inadequate.

If the satisfactory fulfillment of the Contract with extensions and increases authorized in accordance with the requirements of Sections 104.02 and 104.03 of the Specifications requires the performance of work in greater quantities than those specified in the Contract, the Contractor shall inform the Department in writing if the additional quantities require additional time to perform the work and, if so, the reason supporting such a determination and the additional amount of time requested to perform the work due to the greater quantities. The Engineer will determine if additional contract time is warranted by the greater quantities as specified in the Contractor's request. Where the Engineer determines such additional time is warranted, the amount of additional time as well as the additional quantities involved shall be specifically identified in the authorized change order to the Contract.

With a fixed date contract when the date of contract execution is not within 60 calendar days after the opening of bids, or when the Contractor is unable to commence work because of any failure of the Department, or when the Contractor is delayed because of the fault of the Department, the Contractor will be given an extension of time based on the number of days delayed beyond the 60 calendar days. No time extension will be allowed for a delay in the date of contract execution when the delay is the fault of the Contractor.

During prosecution of the work, the Contractor shall identify the causes for any delays attributable to conditions he deems to be beyond his control and shall identify the particular construction operations affected, their criticality to project milestones or overall contract completion, and the significant dates that encompass the periods of delay. The Contractor shall furnish all such information necessary for the Department to make an adequate evaluation of any claim received from the Contractor for an extension of the contract time limit within three days of experiencing such a delay.

The Engineer may give consideration for extension of time when a delay occurs due to unforeseen causes beyond the control of and without the fault or negligence of the Contractor. However, consideration will not be given to extensions of time attributable to normal weather conditions or conditions resulting from normal weather.

If there is a delay in the progress of the work due to unforeseen causes described within these Specifications, and the delay extends the contract time limit into the period between November 30 of one year and April 1 of the following year and working conditions during such period are unsuitable for the continuous prosecution or completion of the work, then consideration may be given to granting an extension of time that will encompass a suitable period during which such work can be expeditiously and acceptably performed.

Section 108.07—Default of Contract is amended to replace (a) in the first paragraph with the following:

- (a) fails to begin the work under the Contract within 5 consecutive calendar days after the date of execution for this Contract.

GUIDELINES — FEDERAL-AID PROJECTS CONTAINING ANY IRON OR STEEL PRODUCTS.**S102CF1-0309****VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION FOR
USE OF DOMESTIC MATERIAL**

February 26, 2009

SECTION 102.05 PREPARATION OF BID of the Specifications is amended to include the following:

In accordance with the provisions of Section 635.410(b) of Title 23 CFR, hereinafter referred to as "Buy America", except as otherwise specified, all iron and steel products (including miscellaneous steel items such as fasteners, nuts, bolts and washers) to be permanently incorporated for use on federal aid projects shall be produced in the United States of America regardless of the percentage they exist in the manufactured product or final form they take. Therefore, "Domestically produced in the United States of America" means all manufacturing processes must occur in the United States of America, to mean, in one of the 50 States, the District of Columbia, Puerto Rico or in the territories and possessions of the United States. Manufacturing processes are defined as any process which alters or modifies the chemical content, physical size or shape or final finish of iron or steel material) such as rolling, extruding, bending, machining, fabrication, grinding, drilling, finishing, or coating whereby a raw material or a reduced iron ore material is changed, altered or transformed into a steel or iron item or product which, because of the process, is different from the original material. For the purposes of satisfying this requirement "coating" is defined as the application of epoxy, galvanizing, painting or any other such process that protects or enhances the value of the material. Materials used in the coating process need not be domestic materials.

For the purposes herein the manufacturing process is considered complete when the resultant product is ready for use as an item in the project (e.g. fencing, posts, girders, pipe, manhole covers, etc.) or is incorporated as a component of a more complex product by means of further manufacturing. Final assembly of a product may occur outside of the United States of America provided no further manufacturing process takes place.

Raw materials such as iron ore, pig iron, processed, pelletized and reduced iron ore, waste products (including scrap, that is, steel or iron no longer useful in its present form from old automobiles, machinery, pipe, railroad rail, or the like and steel trimmings from mills or product manufacturing) and other raw materials used in the production of steel and/or iron products may, however, be imported. Extracting, handling, or crushing the raw materials which are inherent to the transporting the materials for later use in the manufacturing process are exempt from Buy America. The use of foreign source steel or iron billet is not acceptable under the provisions of Buy America. For the purposes of this provision all steel or iron material not meeting the criteria as domestically produced in the United States of America will be considered as "foreign" material. All iron and steel items will be classified hereinafter as "domestic" or "foreign", identified by and subject to the provisions herein.

Domestically produced iron or steel ingots or billets shipped outside the United States of America for any manufacturing process and returned for permanent use in a project would not comply with "Buy America" requirements.

Buy America provisions do not apply to iron or steel products used temporarily in the construction of a project such as temporary sheet piling, temporary bridges, steel scaffolding, falsework or such temporary material or product or material that remains in place for the Contractor's convenience.

Section 635.410(b) of Title 23 CFR permits a minimal amount of steel or iron material to be incorporated in the permanent work on a federal-aid contract. The cost of such materials or products

*These SPECIFICATIONS REVISIONS are subject to change on short notice.

must not exceed one-tenth of one percent of the contract amount or \$2500, whichever is greater. The cost of the foreign iron or steel material is defined as its monetary value delivered to the job site and supported by invoices or bill of sale to the Contractor. This delivered to site cost must include transportation, assembly, installation and testing.

In the event the total cost of all "foreign" iron and steel product or material does not exceed one-tenth of one percent of the total contract cost or \$2,500, whichever is greater, the use of such material meeting the limitations herein will not be restricted by the domestic requirements herein. However, by signing the bid, the Bidder certifies that such cost does not exceed the limits established herein.

Waivers:

With prior concurrence from Federal Highway Administration (FHWA) headquarters, the Federal Highway Division Administrator may grant a waiver to specific projects provided it can be demonstrated:

1. that the use of domestic steel or iron materials would be inconsistent with the public interest; or
2. materials or products requested for use are not produced in the United States in sufficient or reasonably available quantities and are of satisfactory quality for use in the permanent work.

The waiver request shall be submitted with supportive information to include:

1. Project number\description, project cost, waiver item, item cost, country of origin for the product, reason for the waiver, and
2. Analysis of redesign of the project using alternative or approved equal domestic products

In order to grant such a waiver the request for the waiver must be published in the Federal Register for a period not less than 15 days or greater than 60 days prior to waiving such requirement. An initial 15 day comment period to the waiver will be available to the public by means of the FHWA website: <http://www.fhwa.dot.gov/construction/contracts/waivers.cfm>. Following that initial 15 day period of review and comment the request for waiver will be published by the FHWA in the Federal Register. The effective date of the FHWA finding, either to approve or deny the waiver request, will be 15 days following publication in the Federal Register.

Only the FHWA Administrator may grant nationwide waivers which still are subject to the public rulemaking and review process.

Alternative Bidding Procedures:

An alternative bidding procedure may be employed to justify the use of foreign iron and/or steel. To qualify under this procedure the total project is bid using two alternatives, one based on the use of domestic products and the other, the use of corresponding foreign source steel and/or iron materials.

In accordance with the provisions of Section 103.02 the Contract will be awarded to the lowest responsive and responsible bidder who submits the lowest total bid based on furnishing domestic iron or steel unless such total exceeds the lowest total bid based on furnishing foreign iron and/or steel by more than 25 percent, in which case the award will be made to the lowest responsive and responsible bidder furnishing foreign iron and/or steel based upon furnishing verifiable supportive data. The bidder shall submit a bid based on permanently incorporating only domestic iron and/or steel in the construction of the project. The bidder may also submit a bid for the same proposed contract based on being allowed to permanently incorporate corresponding foreign iron and/or steel materials meeting the other contract requirements into the work on the contract. If he chooses to submit such a

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bid, that alternate bid shall clearly indicate which foreign iron and/or steel items will be permanently installed in the work as well as contain prices for all other items listed in the corresponding domestic proposal to complete a total "Foreign" bid.

In the event the contract is awarded to the bidder furnishing foreign iron and/or steel materials or items the provision for price adjustment of steel items will be permitted, however, price fluctuations shall use the U.S. index as stated in the Special Provision for Price Adjustment For Steel. The Contractor must indicate which corresponding eligible steel items he chooses price adjustment to apply. In the event the contract is awarded to a bidder furnishing foreign iron and/or steel items and during the life of that contract the Contractor discovers he can not furnish foreign iron and/or steel material as originally anticipated and agreed upon, he shall be responsible to honor the total bid price and furnish such iron and/or steel materials meeting the contract requirements from other sources as necessary to complete the work.

In the event the Contractor proposes to furnish "foreign" iron and steel and can verify a savings in excess of 25 percent of the overall project cost if bid using domestic materials, the Contractor shall submit a second complete paper bid proposal clearly marked "Foreign" including Form C-7 and supportive data supplement on all sheets. Supportive data shall list, but not be limited to, origin of material, best price offer, quantity and complete description of material, mill analysis, evidence or certification of conformance to contract requirements, etc. The "Foreign" bid shall be completed using the best price offer for each corresponding bid item supplying foreign material in the alternative bid and submit the same with the Contractor's "Domestic" bid. The Contractor shall write the word "Foreign" by the bid total shown on Form C-7 as well as last page of Schedule of Items showing the total bid amount. The bidder shall also contact the State Contract Engineer to inform him that he is also submitting an alternate "Foreign" paper bid..

The information listed on the supportive data sheet(s) will be used to provide the basis for verification of the required cost savings. In the event comparison of the prices given, or corrected as provided in Section 103.01 of the Specifications, shows that use of "foreign" iron and steel items does not represent a cost savings exceeding the aforementioned 25 percent, "domestic" iron and/or steel and prices given there for shall be used and the "100 percent Domestic Items Total" shall be the Contractor's bid.

Certification of Compliance:

Where domestic material is supplied, prior to final payment the Contractor shall furnish to the Department a certificate of compliance (such as may be furnished by steel mill test reports) that all steel and/or iron products supplied to the project except as may be permitted (one-tenth of one percent of the total contract cost or \$2,500, whichever is greater) and permanently incorporated into the work satisfies the domestic requirements herein. This certification shall contain a definitive statement about the origin of all products covered under the provisions of Buy America as stated herein.

In lieu of the Contractor providing personal certification, the Contractor may furnish a stepped certification in which each handler of the product, such as supplier, fabricator, manufacturer, processor, etc. furnishes an individual certification that their step in the process was domestically performed.

GUIDELINES — USE ONLY ON PROJECTS THAT THE STATE CONTRACT ENGINEER SPECIFIES WILL NOT REQUIRE E-BIDDING AND HE/SHE ALSO WAIVES PREQUALIFICATION REQUIREMENTS. SPCN c102b01 Prequalification Waived MUST BE INCLUDED IN THE PROPOSAL.

S102EG0-0708

VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION FOR
ELECTRONIC BIDDING OPTION

September 12, 2007

SECTION 101.02—TERMS of the Specifications is amended as follows:

Proposal is replaced by the following:

The document provided by the Department to prospective bidders or personally obtained by prospective bidders that describe the work for which bids will be accepted which includes the printed or electronic forms on which the Department requires bids to be submitted for the work described.

SECTION 102—BIDDING REQUIREMENTS AND CONDITIONS of the Specifications is amended as follows:

Section 102.02(a) Standard Proposal is amended to replace the second paragraph with the following:

Papers bound with or attached to the paper proposal or attachments to the electronic proposal will be considered a part of the bid. The plans, Specifications, and other documents specified in the proposal will be considered a part of the proposal.

Section 102.05(a) General is amended as follows:

The third paragraph is replaced with the following:

The bidder shall submit his bid by approved electronic media or paper. Bids that are submitted electronically shall be signed with a digital signature.

The fourth paragraph is replaced with the following:

The bidder shall furnish a unit or lump sum price as called for in the proposal, in numerical figures, for each pay item listed. The bidder shall also show the products of the unit prices and quantities in numerical figures in the column provided for that purpose and the total amount of the bid. Figures shall be handwritten in ink or typed.

The sixth paragraph is replaced with the following:

In the event there is a discrepancy between the bidder's electronically generated proposal form and the official proposal form as furnished by the Department, the Department proposal form will govern. In the event the Contractor submits a paper and an electronic bid for the same project, the paper bid will prevail.

Section 102.05(d) Required Certifications is amended to add to the second the following:

The original of the sworn statement shall be filed with the Department when the bid is submitted.

*These SPECIFICATIONS REVISIONS are subject to change on short notice.

Section 102.05(f) Signing the Bid is replaced with the following:

The bid shall be signed by the individual, one or more members of a partnership, or one or more of the officers of a corporation, whichever is applicable, in ink or by a digital identification. For a joint venture, the bid shall be signed in ink by each individual identified prior to receipt of bids, as representing the joint venture. If the individual is not previously identified as representing a joint venture, the firm of record is responsible for the bid.

Section 102.06—Irregular Bids is amended in the first paragraph as follows:**Section 102.06(l)** is replaced with the following:

if any papers included in the paper bid or attachments included in the electronic bid are detached or altered when the bid is submitted except as otherwise provided for herein

Section 102.06(i) is replaced with the following:

if envelopes containing submitted paper bids or bids submitted by electronic media show a designation for a project other than the project for which the bid is made

Section 102.06(m) is replaced with the following:

if electronic bid is submitted, failure to be registered with “eVA Internet e-procurement solution” prior to the award of the Contract

Section 102.06(n) is added as follows:

if the paper bid is not written in ink or typed.

Section 102.09—Submission of Bid is replaced by the following:

Each electronic bid shall be submitted to the Department by approved electronic media in accordance with the policy in place at the time of the advertisement and bid. This information will be posted on the Construction website at www.virginiadot.org/business/const. Refer to “Electronic Bidding” information.

Each paper bid may be submitted in the envelope furnished by the Department. The blank spaces on the envelope shall be filled in correctly. When any other envelope is used, it shall be the same general size and shape as the envelope furnished by the Department and shall be marked to indicate its contents clearly. Bids shall be sealed in an envelope and addressed to: Contract Engineer's Office, VDOT, 1401 E. Broad Street, Richmond, VA 23219.

Bids shall be filed prior to the time and at the place specified in the Notice of Advertisement. Bids received after that time will be returned to the bidder unopened. The date for the opening of bids may be deferred by the Department, in which case the bidders will be notified.

Section 102.10(a) Standard Withdrawal is replaced by the following:

(a) Standard Withdrawal: Electronic bids may be withdrawn as allowed by the electronic bidding system until bid closing. A bidder may withdraw an electronic or paper bid provided the request for the withdrawal is written and signed by a person(s) who qualifies to execute the bid in accordance with the requirements of Section 102.05 of the Specifications.

Section 102.11—eVA Business-To-Government Vendor Registration is amended to include the following:

Bidders submitting bids by approved electronic media are not required to be registered with "eVA Internet e-procurement solution" at the time bids are submitted, however, prior to award, the lowest responsive and responsible bidder must be registered with "eVA Internet e-procurement solution" or the bid will be rejected. Registration shall be performed by accessing the eVA web site portal www.eva.state.va.us, following the instructions and complying with the requirements therein.

Section 102.12—Public Opening of Bids is replaced by the following:

Electronic bids will be decrypted, opened, printed to paper and, along with all other bids, read publicly at the time and place specified in the Notice of Advertisement. Paper bids will be opened and along with all other bids, read publicly at the time and place specified in the Notice of Advertisement. Interested parties are invited to be present. As-Read results will be posted on the Construction website at www.VDOT.Virginia.gov as soon as possible on the day of reading.

GUIDELINES — ALL PROJECTS LOCATED IN VOC EMISSION CONTROL AREAS (LARGER URBAN & ASSOCIATED SUBURBS, See this special provision for specifics).

S107E01-0708

VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION FOR
VOLATILE ORGANIC COMPOUND (VOC) EMISSIONS CONTROL AREAS

July 15, 2008

VOC Emission Control Area - The Contractor is advised that this project may be located in a volatile organic compound (VOC) emissions control area identified in the State Air Control Board Regulations (9 VAC 5-20) and in Table 1 below. Therefore, the following limitations may apply:

- Open burning is prohibited during the months of May, June, July, August, and September in VOC Emissions Control areas
- Cutback asphalt is prohibited April through October except when use or application as a penetrating prime coat or tack is necessary in VOC Emissions Control areas

Table 1. Virginia Department of Environmental Quality Volatile Organic Compound (VOC) Emissions Control Areas*

VOC Emissions Control Area	VDOT District	Jurisdiction
Northern Virginia	NOVA	Alexandria City Arlington County Fairfax County Fairfax City Falls Church City Loudoun County Manassas City Manassas Park City Prince William County
Northern Virginia	Fredericksburg	Stafford County
Fredericksburg	Fredericksburg	Spotsylvania County Fredericksburg City
Hampton Roads	Fredericksburg	Gloucester County
Hampton Roads	Hampton Roads	Chesapeake City Hampton City Isle of Wight County James City County Newport News City Norfolk City Poquoson City Portsmouth City Suffolk City Virginia Beach City Williamsburg City York County

*These SPECIFICATIONS REVISIONS are subject to change on short notice.

Richmond	Richmond	Charles City County Chesterfield County Colonial Heights City Hanover County Henrico County Hopewell City Petersburg City Prince George County Richmond City
Western Virginia	Staunton	Frederick County Winchester City
Western Virginia	Salem	Roanoke County Botetourt County Roanoke City Salem City

* Regulations for the Control and Abatement of Air Pollution (9 VAC 5-20-206)

See the Virginia Code (9 VAC 5 Chapter 40 – Article 39 (Emission Standards for Asphalt Paving Operations (Rule 4-39)) and Article 40 (Emission Standards for Open Burning (Rule 4-40)) for further clarification. In addition to the above requirements, the Contractor's attention is directed to the requirements of Section 107.14 of the Specifications, because other air pollution requirements may also apply.

GUIDELINES — ALL PROJECTS WITH POTENTIAL LAND-DISTURBING ACTIVITIES. THE RESIDENCY ADMINISTRATOR WILL DETERMINE IF FORM IS STILL NEEDED FOR PROJECT AFTER PROJECT IS AWARDED. EXCEPTION:—: NOT REQUIRED FOR REGIONAL SIGNALS PROJECTS.

S107G01-0309

C-45

Rev. 2-19-09

VIRGINIA DEPARTMENT OF TRANSPORTATION

STORMWATER POLLUTION PREVENTION PLAN (SWPPP) GENERAL PERMIT FOR THE DISCHARGE OF STORMWATER FROM CONSTRUCTION ACTIVITIES CONTRACTOR AND SUBCONTRACTOR CERTIFICATION STATEMENT

Order No.: _____ Project Number: _____

Route: _____ Contract ID. #: _____

I certify under penalty of law that I understand the terms and conditions of the project contract, plans, permits, specifications and standards related to the erosion and sediment control, stormwater management and stormwater pollution prevention plan requirements for the affected activities associated with this project, the Virginia Stormwater Management Program (VSMP), and the General Permit for the Discharge of Stormwater from Construction Activities, if applicable to this project, issued by the Virginia Department of Conservation and Recreation. The VSMP Permit authorizes the storm water discharges associated with the construction activities from the project site identified and described in the bid documents and subsequent contract including any off-site support activities required for the complete fulfillment of the work therein.

Signature: _____

Name: _____

Title: _____

Contracting Firm: _____

Address: _____

Phone Number: _____

Address/Description of Site: _____
(Include off-site areas) _____

Certified on this date: _____

(Note: This form must be returned with performance and payment bonds)

*These SPECIFICATIONS REVISIONS are subject to change on short notice.

2007

GUIDELINES — FEDERAL PROJECTS ONLY**S107HF0-0708****VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION FOR
SECTION 107.15**

January 17, 2008cc

Section 107.15 of the Specifications is replaced by the following:**Section 107.15—Use of Disadvantaged Business Enterprises (DBEs)****Disadvantaged Business Enterprise (DBE) Program Requirements.**

Any Contractor, subcontractor, supplier, DBE firm, and contract surety involved in the performance of work on a federal-aid contract shall comply with the terms and conditions of the USDOT DBE Program as the terms appear in Part 26 of the Code of Federal Regulations (49 CFR as amended), the USDOT DBE Program regulations; and VDOT's Road and Bridge Specifications and DBE Program rules and regulations.

All time frames referenced in this provision are expressed in workdays unless otherwise indicated. Should the expiration of any deadline fall on a weekend or holiday, such deadline will automatically be extended to the next normal workday.

All administrative remedies noted in this provision are automatic unless the Contractor exercises the right of appeal within the required timeframe(s) specified herein. Appeal requirements, processes, and procedures shall be in accordance with guidelines stated herein and current at the time of the proceedings. Where applicable, the Department will notify the Contractor of any changes to the appeal requirements, processes, and procedures after receiving notification of the Contractor's desire to appeal.

Miscellaneous DBE Program Requirements.

In accordance with 49 CFR Part 26 and VDOT's DBE Program requirements, the Contractor, for itself and for its subcontractors and suppliers, whether certified DBE firms or not, shall commit to complying fully with the auditing, record keeping, confidentiality, cooperation, and anti-intimidation or retaliation provisions contained in those federal and state DBE Program regulations. By bidding on this contract, and by accepting and executing this contract, the Contractor agrees to assume these contractual obligations and to bind the Contractor's subcontractors contractually to the same at the Contractor's expense.

Required Contract Provisions.

For the purposes of this provision, Contractor is defined as the Prime Contractor of the contract; and sub-contractor is defined as any DBE supplier, manufacturer, or subcontractor performing work or furnishing material, supplies or services to the contract. The Contractor shall physically include this same contract provision in every supply or work/service subcontract that it makes or executes with a subcontractor having work for which it intends to claim credit.

The Contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Contractor shall carry out applicable requirements of 49 CFR Part 26 in the award, administration, and performance of this contract. Failure by the Contractor to carry out these requirements is a material breach of this contract, which will result in the termination of this contract or other such remedy, as VDOT deems appropriate.

*These SPECIFICATIONS REVISIONS are subject to change on short notice.

Bank Services.

The Contractor and each subcontractor are encouraged to use the services of banks owned and controlled by socially and economically disadvantaged individuals. Such banking services and the fees charged for services typically will not be eligible for DBE Program contract goal credit. Such information is available from the VDOT's Internet Civil Rights Division website: www.Virginia-dot.org/business/bu-civil-rights-support-specs.

DBE Certification.

The only DBE firms eligible to perform work on a federal-aid contract for DBE contract goal credit are firms certified as Disadvantaged Business Enterprises by the Department of Minority Business Enterprises or VDOT in accordance with federal and VDOT guidelines. A directory listing of certified DBE firms can be obtained from Department of Minority Business Enterprises Internet website: www.dmbe.state.va.us

DBE Program-related Certifications Made by Bidders\Contractors.

Bids will be considered non-responsive and will be rejected for failure to comply with the requirements of this Special Provision and the contract specifications. By submitting a bid and by entering into any contract on the basis of that bid, the bidder/Contractor certifies to each of the following DBE Program-related conditions and assurances:

- (1) That the management and bidding officers of its firm agree to comply with the bidding and project construction and administration obligations of the USDOT DBE Program requirements and regulations of 49 CFR Part 26 as amended, and VDOT's Road and Bridge Specifications and DBE Program requirements and regulations.
- (2) Under penalty of perjury and other applicable penal law that it has complied with the DBE Program requirements in submitting the bid, and shall comply fully with these requirements in the bidding, award, and execution of the contract.
- (3) To ensure that certified DBE firms have been given full and fair opportunity to participate in the performance of the contract. The bidder certifies that all reasonable steps were, and will be, taken to ensure that DBE firms had and will have an opportunity to compete for and perform work on the contract. The bidder further certifies that the bidder shall not discriminate on the basis of race, color, age, national origin, or sex in the performance of the contract or in the award of any subcontract.

Any agreement between a bidder and a DBE whereby the DBE promises not to provide quotations for performance of work to other bidders is prohibited.

- (4) As a bidder good faith efforts were made to obtain certified DBE participation in the proposed contract at or above the goal for certified DBE participation established by VDOT. It has submitted as a part of its bid a true, accurate, complete, and detailed written explanation of the good faith efforts it performed to meet the contract goal for certified DBE participation.
- (5) Once awarded the contract, the Contractor shall make good faith efforts to utilize certified DBE firms to perform work designated to be performed by certified DBEs at or above the amount or percentage of the dollar value specified in the bidding documents. Further, the Contractor understands it shall not unilaterally terminate, substitute for, or replace any DBE firm that was designated in the executed contract in whole or in part with another DBE, any non-DBE firm, or with the Contractor's own forces or those of an affiliate of the

Contractor without the prior written consent of VDOT as set out within the requirements of this provision.

Once a contract is awarded, the Contractor shall designate and make known to the Department a liaison officer who is assigned the responsibility of administering and promoting an active and inclusive DBE program as required by 49 CFR Part 26 for certified DBEs. The designation and identity of this officer need be submitted only once by the Contractor during any twelve (12) month period at the preconstruction conference for the first contract the Contractor has been awarded during that reporting period. The Department will post such information for informational and administrative purposes at VDOT's Internet Civil Rights Division website.

- (6) Once awarded the contract, the Contractor shall comply fully with all regulatory and contractual requirements of the USDOT DBE Program, and that each DBE firm participating in the contract shall fully perform the designated work items with the DBE's own forces and equipment under the DBE's direct supervision, control, and management. If it is awarded the contract and if VDOT determines that as the Contractor, a DBE or any other firm retained by the Contractor has failed to comply with federal or VDOT DBE Program regulations and/or their requirements on that contract, VDOT has the authority and discretion to determine the extent to which the DBE contract goals have not been met, and will assess against the Contractor any remedies available at law or provided in the contract in the event of such a contract breach.
- (7) In the event a bond surety takes over the completion of work after VDOT has terminated the prime Contractor, the surety shall be obligated to meet the same DBE contract goals as were required of the original prime Contractor in accordance with the requirements of this specification.

Designation of DBE Firms to Perform on Contract.

The bidder, by signing and submitting its bid, certifies the DBE participation information submitted within the stated time thereafter is true, correct, and complete, and that the information provided includes the names of all certified DBE firms that will participate in the contract, the specific line item(s) that each listed certified DBE firm will perform, and the creditable dollar amounts of the participation of each listed certified DBE. The specific line item must reference the VDOT line number and item number contained in the proposal. The bidder further certifies, by signing its bid, it has committed to use each certified DBE firm listed for the specific work item shown to meet the contract goal for certified DBE participation. Award of the contract will be conditioned upon meeting these and other listed requirements of 49 CFR Part 26.53 and the contract documents.

By signing the bid, the bidder certifies on work it proposes to sublet, it has made good faith efforts to seek out and consider certified DBEs as potential subcontractors. The bidder shall contact DBEs to solicit their interest, capability, and prices in sufficient time to allow them to respond effectively, and shall retain on file proper documentation to substantiate its good faith efforts.

When a DBE firm has been removed from eligibility as a certified DBE firm, the following actions will be taken:

- (1) When a Contractor has made a commitment to use a DBE firm that is not currently certified, thereby making the Contractor ineligible to receive DBE participation credit for work performed, and a subcontract has not been executed, the ineligible DBE firm does not count toward either the contract goal or overall goal. The Contractor shall meet the

contract goal with a DBE firm that is eligible to receive DBE credit for work performed, or must demonstrate to the Engineer that it has made good faith efforts to do so.

When a Contractor has executed a subcontract with a certified DBE firm prior to official notification of the DBE firm's loss of eligibility, the Contractor may continue to use the firm on the contract and shall continue to receive DBE credit toward its DBE goal for the subcontractor's work.

When VDOT has executed a prime contract with a DBE firm that is certified at the time of contract execution but that is later ruled ineligible, the portion of the ineligible firm's performance on the contract before VDOT has issued the notice of its ineligibility shall count toward the contract goal.

- (2) If a certified DBE subcontractor is terminated, or fails, refuses, or is unable to complete the work on the contract for any reason, the Contractor must promptly request approval to substitute or replace that firm in accordance with this section of this Special Provision. The Contractor, as aforementioned in (1) above, shall notify VDOT in writing before terminating and/or replacing the certified DBE that was committed as a condition of contract award or that is otherwise being used or represented to fulfill certified DBE contract obligations during the contract performance period. Written consent from the Department for terminating the performance of any DBE shall be granted only when the Contractor can demonstrate that the DBE is unable, unwilling, or ineligible to perform its obligations for which the Contractor sought credit toward the contract DBE goal. Such written consent by the Department to terminate any DBE shall concurrently constitute written consent to substitute or replace the terminated DBE with another DBE. Consent to terminate a certified DBE shall not be based on the Contractor's ability to negotiate a more advantageous contract with another subcontractor whether that subcontractor is, or is not, a certified DBE

(a) Contractor's Written Request to Terminate DBE

All Contractor requests to terminate, substitute, or replace a certified DBE shall be in writing, and shall include the following information:

- (i) The date the Contractor determined the certified DBE to be unwilling, unable, or ineligible to perform;
- (ii) The projected date that the Contractor shall require a substitution or replacement DBE to commence work if consent is granted to the request;
- (iii) A brief statement of facts describing and citing specific actions or inaction by the certified DBE giving rise to the Contractor's assertion that the certified DBE is unwilling, unable, or ineligible to perform;
- (iv) A brief statement of the affected certified DBE's capacity and ability to perform the work as determined by the Contractor;
- (v) A brief statement of facts regarding actions taken by the Contractor which are believed to constitute good faith efforts toward enabling the certified DBE to perform;
- (vi) The current percentage of work completed on each bid item by the certified DBE;

- (vii) The total dollar amount currently paid per bid item for work performed by the DBE;
 - (viii) The total dollar amount per bid item remaining to be paid to the certified DBE for work completed, but for which the certified DBE has not received payment, and with which the Contractor has no dispute;
 - (ix) The total dollar amount per bid item remaining to be paid to the certified DBE for work completed, but for which the certified DBE has not received payment, and over which the Contractor and/or the certified DBE have a dispute.
- (b) Contractor's Written Notice to DBE of Pending Request to Terminate and Substitute With Another DBE

The Contractor shall send a copy of the "request to terminate and substitute" letter to the affected committed DBE firm, in conjunction with submitting the request to the Engineer. The affected DBE firm may submit a response letter to the Department within two (2) working days of receiving the notice to terminate from the Contractor. The affected DBE firm shall explain its position concerning performance on the committed work. The Department will consider both the Contractor's request and the DBE's response and explanation before approving the Contractor's termination and substitution request, or determining if any action should be taken against the Contractor.

If, after making its best efforts to deliver a copy of the "request to terminate and substitute" letter, the Contractor is unsuccessful in notifying the affected DBE firm, the Department will verify the affected, committed DBE firm is unable or unwilling to continue the contract, and the Department will immediately approve the Contractor's request for a substitution.

(c) Proposed Substitution of Another Certified DBE

Upon termination of a certified DBE, the Contractor shall use reasonable good faith efforts to replace the terminated DBE. The termination of such certified DBE shall not relieve the Contractor of its obligations pursuant to this section, and the unpaid portion of the terminated certified DBE's contract would not be counted toward the contract goal.

When a DBE substitution is necessary the Contractor shall submit in writing the name of another certified DBE firm, the proposed work to be performed by that firm, and the dollar amount of the work to replace the unfulfilled portion of the work of the originally committed DBE firm. The Contractor shall furnish all pertinent information including contract I.D. number, project number, bid item, item description, bid unit and bid quantity, unit price, and total price. In addition, the Contractor shall submit documentation for the requested substitute DBE as described in this section of this Special provision.

Should the Contractor be unable to commit the remaining required dollar value to the substitute DBE, the Contractor shall provide written evidence of good faith efforts made to obtain the substitute value requirement. The Department will review the quality, thoroughness, and intensity of those efforts. Efforts that are merely superficial or pro-forma will not be considered good faith efforts to meet the contract goal for certified DBE participation. The Contractor must document the steps taken that demonstrate good faith efforts to obtain participation as set forth in the **Good Faith Efforts Described** section of this Special Provision.

Bidding Procedures.

The following bidding procedures shall apply to the contract for DBE Program compliance purposes:

Contract Goal, Good Faith Efforts Specified.

All bidders evidencing the attainment of DBE goal commitment equal to or greater than the required DBE goal established for the project must submit completed Form C-111 as a part of the bid documents. Form C-111 may be submitted electronically or may be faxed to the Department, but in no case shall the bidder's Form C-111 be received later than 2 hours after the time stated in the bid proposal for the receipt of bids.

If, at the time of submitting its bid the bidder knowingly cannot meet or exceed the required DBE contract goal, it shall submit Form C-111 exhibiting the DBE participation it attained as a part of its bid documents. The bidder shall then submit its good faith efforts within two (2) working days after the bid opening.

The lowest responsive and responsible bidder must submit its properly executed Form C-112 within two (2) working days after the bids have been opened and the determination of apparent lowest bidder. If, after review of the apparent lowest bid, VDOT determines the DBE requirements have not been met, the apparent lowest successful bidder must submit good faith documentation, which must be received by the Contract Engineer within two (2) working days after official notification of such failure to meet the aforementioned DBE requirements.

Good Faith Efforts Described.

Good faith efforts may be determined through use of the following list of the types of actions the bidder may make to obtain DBE participation. This is not intended to be a mandatory checklist, nor is it intended to be exclusive or exhaustive. Other factors or types of efforts of similar intent may be relevant in appropriate cases:

- (1) Soliciting through reasonable and available means, such as but not limited to, attendance at pre-bid meetings, advertising, and written notices to certified DBEs who have the capability to perform the work of the contract. Examples include: advertising in at least one daily newspaper of general circulation; phone contact with a completely documented telephone log, including the date and time called, contact person, or voice mail status; and internet contacts with supporting documentation, including dates advertised. The bidder shall solicit this interest no less than five (5) business days before the bids are due so that the solicited DBEs have enough time to reasonably respond to the solicitation. The bidder shall determine with certainty if the DBEs are interested by taking reasonable steps to follow up initial solicitations as evidenced by documenting such efforts on Department standard good faith documentation forms;
- (2) Selecting portions of the work to be performed by certified DBEs in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the Contractor might otherwise prefer to perform these work items completely or with its own forces;

- (3) Providing interested certified DBEs with adequate information about the plans, specifications, and requirements of the contract in a timely manner, which will assist the DBEs in responding to a solicitation;
- (4) Negotiating for participation in good faith with interested DBEs;
 - (a) Evidence of such negotiation shall include the names, addresses, and telephone numbers of DBEs that were considered; dates DBEs were contacted, a description of the information provided regarding the plans, specifications, and requirements of the contract for the work selected for subcontracting; and, if insufficient DBE participation seems likely, evidence as to why additional agreements could not be reached for DBEs to perform the work;
 - (b) A bidder using good business judgment should consider a number of factors in negotiating subcontractors, including certified DBE subcontractors, and should take a firm's price, qualifications, and capabilities, as well as contract goals, into consideration. However, the fact that there may be some additional costs involved in finding and using certified DBEs is not sufficient reason for a bidder's failure to meet the contract goal for certified DBE participation, as long as such costs are reasonable and comparable to costs customarily appropriate to the type of work under consideration. Also, the ability or desire of a bidder to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make diligent good faith efforts. Bidders are not, however, required to accept higher quotes from DBEs if the price difference can be shown by the bidder to be excessive, unreasonable; or greater than would normally be expected by industry standards;
- (5) A bidder cannot reject a certified DBE as being unqualified without sound reasons based on a thorough investigation of the DBE's capabilities. The certified DBE's standing within its industry, membership in specific groups, organizations, associations and political or social affiliations, and union vs. non-union employee status are not legitimate causes for the rejection or non-solicitation of bids in the bidder's efforts to meet the project goal for certified DBE participation;
- (6) Making efforts to assist interested certified DBEs in obtaining bonding, lines of credit, or insurance as required by VDOT or by the bidder/Contractor;
- (7) Making efforts to assist interested certified DBEs in obtaining necessary equipment, supplies, materials, or related assistance or services subject to the restrictions contained in these provisions;
- (8) Effectively using the services of appropriate personnel from VDOT and from the Virginia Department of Minority Business Enterprises, (VDMBE); available minority/women community or minority organizations; contractors' groups; local, state, and Federal minority/ women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and utilization of qualified DBEs.

Bid Rejection.

The failure of a bidder to submit the required documentation within the timeframes specified in the **Contract Goal, Good Faith Efforts Specified** section of this Special Provision may be cause for rejection of that bidder's bid.

In order to award a contract to a bidder that has failed to meet DBE contract goal requirements, VDOT will determine if the bidder's efforts were adequate good faith efforts, and if given all relevant circumstances, those efforts were to the extent a bidder actively and aggressively seeking to meet the requirements would make. Efforts to obtain DBE participation are not good faith efforts if they could not reasonably be expected to produce a level of DBE participation sufficient to meet the DBE Program and contract goal requirements.

If the lowest bidder is rejected for failure to submit required documentation, the Department may either award the work to the next lowest bidder, or re-advertise and construct the work under contract or otherwise as determined by the Commonwealth Transportation Board (CTB).

Documentation, and Administrative Reconsideration of Good Faith Efforts.

During Bidding

As described in the **Contract Goal, Good Faith Efforts Specified** section of this Special Provision, the bidder must provide certified written documentation of its good faith efforts made to meet the DBE contract goal as proposed by VDOT within the timeframe specified in this section of the provision. No extension of time for submittal of good faith effort documentation will be allowed. The means of transmittal and the risk for timely receipt of this information shall be the responsibility of the bidder. The bidder shall attach additional pages to the certification, if necessary, in order to fully detail specific good faith efforts made to obtain certified DBE firm participation in the proposed contract work.

However, regardless of the DBE contract goal participation level proposed by the bidder or the extent of good faith efforts shown, all bidders shall timely and separately file their completed and executed Forms C-111 and C-112 and good faith efforts as aforementioned, or face potential bid rejection. If a bidder does not submit its completed and executed C-111 or C-112 when required by this Special Provision the bidder's bid will be considered non-responsive and will be rejected.

Where the Department upon initial review of the bid results determines the apparent low bidder has failed or appears to have failed to meet the requirements of the **Contract Goal, Good Faith Efforts Specified** section of this Special Provision and has failed to adequately document that it made a good faith effort to achieve sufficient DBE participation as specified in the bid proposal, that firm upon notification of the Department's initial determination will be offered the opportunity for administrative reconsideration before VDOT rejects that bid as non-responsive. The bidder shall address such request for reconsideration in writing to the Contract Engineer within five (5) days of receipt of notification by the Department and shall be given the opportunity to discuss the issue and present its evidence in person to the Administrative Reconsideration Panel. The Administrative Reconsideration Panel will be made up of VDOT Division Administrators for the Civil Rights, Scheduling and Contract and Procurement divisions, none of who took part in the initial determination that the bidder failed to make the goal or make adequate good faith efforts to do so. After reconsideration, VDOT shall notify the bidder in writing of its decision and explain the basis for finding that the bidder did or did not meet the goal or make adequate good faith efforts to do so.

If, after reconsideration, the Department determines the bidder has failed to meet the requirements of the contract goal and has failed to make adequate good faith efforts to achieve the level of DBE participation as specified in the bid proposal, the bidder's bid will be rejected.

If sufficient documented evidence is presented to demonstrate that the apparent low bidder made reasonable good faith efforts, the Department will award the contract and reduce the DBE requirement to the actual commitment identified by the lowest successful bidder at the time of its bid.

However, such action will not relieve the Contractor of its responsibility for complying with the reduced DBE requirement during the life of the contract or any administrative sanctions as may be appropriate.

During the Contract

If the Contractor fails upon completion of the project to meet the required participation, the Contractor and any prime contractual affiliates, as in the case of a joint venture, may be enjoined from bidding as a prime Contractor, or participating as a subcontractor on VDOT projects for a period of 90 days.

Prior to enjoinder from bidding or denial to participate as a subcontractor for failure to comply with participation requirements, as provided hereinbefore, the Contractor may submit documentation to the Engineer to substantiate that failure was due solely to quantitative underrun(s) or elimination of items subcontracted to DBEs, and that all feasible means have been used to obtain the required participation. The Engineer upon verification of such documentation shall make a determination whether or not the Contractor has met the requirements of the contract.

If it is determined that the aforementioned documentation is insufficient or the failure to meet required participation is due to other reasons, the Contractor may request an appearance before the Administrative Reconsideration Panel to establish that all feasible means were used to meet such participation requirements. The decision of the Administrative Reconsideration Panel shall be administratively final. The enjoinder period will begin upon the Contractor's failure to request a hearing within the designated time frame or upon the Administrative Reconsideration Panel's decision to enjoin, as applicable.

DBE Participation for Contract Goal Credit

DBE participation on the contract will count toward meeting the DBE contract goal in accordance with the following criteria:

- (1) Cost-plus subcontracts will not be considered to be in accordance with normal industry practice and will not normally be allowed for credit.
- (2) The applicable percentage of the total dollar value of the contract or subcontract awarded to the DBE will be counted toward meeting the contract goal for certified DBE participation in accordance with the **Designation of DBE Firms to Perform on Contract** section of this Special Provision for the value of the work, goods, or services that are actually performed or provided by the certified DBE firm itself or subcontracted by the certified DBE to other certified DBE firms.
- (3) When a certified DBE performs work as a participant in a joint venture, the Contractor may count toward the DBE goal only that portion of the total dollar value of the contract equal to the distinctly defined portion of the contract work that the DBE has performed with the DBE's own forces or in accordance with the provisions of this Section. The Department shall be contacted in advance regarding any joint venture involving both a certified DBE firm and a non-DBE firm to coordinate Department review and approval of the joint venture's organizational structure and proposed operation where the Contractor seeks to claim the certified DBE's credit toward the DBE contract goal.

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When a DBE subcontracts part of the work of the contract to another firm, the value of that subcontracted work may be counted toward the DBE contract goal only if the DBE's subcontractor at a lower tier is a VDOT certified DBE. Work that a certified DBE subcontracts to either a non-DBE firm or to a non-certified DBE firm will not count toward the DBE contract goal. The cost of supplies and equipment a DBE subcontractor purchases or leases from the prime Contractor or the prime's affiliated firms will not count toward the contract goal for certified participation.

- (4) The Contractor may count expenditures to a certified DBE subcontractor toward the DBE contract goal only if the certified DBE performs a Commercially Useful Function (CUF) on that contract.
- (5) A Contractor may not count the participation of a certified DBE subcontractor toward the Contractor's final compliance with the DBE contract goal obligations until the amount being counted has actually been paid to the certified DBE. A Contractor may count sixty (60) percent of its expenditures actually paid for materials and supplies obtained from a DBE certified by VDOT as a regular dealer, and one hundred (100) percent of such expenditures actually paid for materials and supplies obtained from a VDOT certified DBE manufacturer.
 - (a) For the purposes of this Special Provision, a regular dealer is defined as a firm that owns, operates, or maintains a store, warehouse, or other establishment in which the material, supplies, articles, or equipment required and used under the contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business. To be a regular dealer, the certified DBE firm shall be an established business that regularly engages, as its principal business and under its own name, in the purchase and sale or lease of the products in question. Packagers, brokers, manufacturers' representatives, or other persons who arrange or expedite transactions will not be considered regular dealers.
 - (b) A certified DBE firm may be a regular dealer in such bulk items as petroleum products, steel, cement, gravel, stone, or asphalt without owning, operating, or maintaining a place of business where it keeps such items in stock if the certified DBE both owns and operates distribution equipment for the products it sells and provides for the contract work. Any supplementation of a regular dealer's own distribution equipment shall be by a long-term lease agreement and not on an *ad hoc* or contract-by-contract basis to be eligible for credit to meet the DBE contract goal.
 - (c) If a certified DBE regular dealer is used for DBE contract goal credit, no additional credit will be given for hauling or delivery to the project site goods or materials sold by that certified DBE regular dealer. Those delivery costs shall be deemed included in the price charged for the goods or materials by the certified DBE regular dealer, who shall be responsible for their distribution.
 - (d) For the purposes of this Special Provision, a manufacturer will be defined as a firm that operates or maintains a factory or establishment that produces on the premises the material, supplies, articles, or equipment required under the contract and of the general character described by the project specifications. A manufacturer shall include firms that produce finished goods or products from raw or unfinished material, or purchase and substantially alter goods and materials to make them suitable for construction use before reselling them.

- (6) A Contractor may count toward the DBE contract goal the following expenditures to certified DBE firms that are not regular dealers or manufacturers for DBE program purposes:
- (a) The entire amount of fees or commissions charged by a certified DBE firm for providing a bona fide service, such as professional, technical, consultant or managerial services, or for providing bonds or insurance specifically required for the performance of the federal-aid contract, if the fee is reasonable and not excessive or greater than would normally be expected by industry standards for the same or similar services.
 - (b) The entire amount of that portion of the construction contract that is performed by the certified DBE's own forces and equipment under the DBE's supervision. This includes the cost of supplies and materials ordered and paid for by the certified DBE for contract work, including supplies purchased or equipment leased by the certified DBE, except supplies and equipment a certified DBE subcontractor purchases or leases from the prime Contractor or its affiliates.
- (7) A Contractor may count toward the DBE contract goal one hundred (100) percent of the fees paid to a certified DBE trucker or hauler for the delivery of material and supplies required on the project job site, but not for the cost of those materials or supplies themselves, provided that the trucking or hauling fee is determined by VDOT to be reasonable, as compared with fees customarily charged by non-DBE firms for similar services. Nor could a Contractor count costs for the removal or relocation of excess material from or on the job site when the certified DBE trucking company is not also the manufacturer of or a regular dealer in those materials and supplies. The certified DBE trucking firm shall also perform a CUF on the project and not operate merely as a pass through for the purposes of gaining credit toward the DBE contract goal. Prior to submitting a bid, the Contractor shall determine, or contact the VDOT Civil Rights Division or its district Offices for assistance in determining, whether a DBE trucking firm will meet the criteria for performing a CUF on the project.
- (8) The Contractor will receive DBE contract goal credit for the fees or commissions charged by and paid to a certified DBE broker who arranges or expedites sales, leases, or other project work or service arrangements provided that those fees are determined by VDOT to be reasonable and not excessive as compared with fees customarily charged by non-DBE firms for similar services. For the purposes of this Special Provision, a broker is defined as a person or firm that arranges for delivery of material, supplies, and equipment, or arranges project services but does not own or operate the delivery equipment necessary to transport materials, supplies, or equipment to or from a job site. A broker typically shall not purchase or pay for the material, supplies, or equipment, and if the broker does purchase or pay for those items those costs will be reimbursed in full. To receive DBE contract goal credit VDOT must determine that the DBE broker has performed a CUF in providing the contract work or service.

Performing a Commercially Useful Function (CUF)

No credit toward the DBE contract goal will be allowed for contract payments or expenditures to a certified DBE firm if that DBE firm does not perform a CUF on that contract. A DBE performs a CUF when the DBE is solely responsible for execution of a distinct element of the contract work and the DBE actually performs, manages, and supervises the work involved with the firm's own forces or in accordance with the provisions of the **DBE Participation for Contract Goal Credit** section of this Special Provision. To perform a CUF the certified DBE alone shall be responsible and bear the risk for the material and supplies used on the contract, selecting a supplier or dealer

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from those available, negotiating price, determining quality and quantity, ordering the material and supplies, installing those materials with the certified DBE's own forces and equipment, and paying for those materials and supplies. The amount the certified DBE firm is to be paid under the contract shall be commensurate with the work the certified DBE actually performs and the DBE credit claimed for the certified DBE's performance.

Monitoring CUF Performance

It shall be the Contractor's responsibility to ensure that all certified DBE firms selected for subcontract work on the contract, for which he seeks to claim credit toward the contract goal, perform a CUF. Further, the Contractor is responsible for and shall ensure that each certified DBE firm fully performs the certified DBE's designated tasks with the certified DBE's own forces and equipment under the certified DBE's own direct supervision and management or in accordance with the provisions of the **DBE Participation for Contract Goal Credit** section of this Special Provision. For the purposes of this provision the DBE's equipment will mean either equipment directly owned by the DBE as evidenced by title, bill of sale or other such documentation or leased by the DBE and over which the DBE has control as evidenced by the leasing agreement from a firm not owned in whole or part by the prime Contractor or an affiliate of the Contractor under this contract.

VDOT will monitor the Contractor's DBE involvement during the performance of the contract. However, VDOT is under no obligation to warn the Contractor that a DBE's participation will not count toward the goal.

DBEs Must Perform a Useful and Necessary Role in Contract Completion

A DBE does not perform a commercially useful function if the DBE's role is limited to that of an extra participant in a transaction, contract, or project through which funds are passed in order to obtain the appearance of DBE participation.

DBEs Must Perform The Contract Work With Their Own Workforces

If a DBE does not perform and exercise responsibility for at least thirty (30) percent of the total cost of the DBE's contract with the DBE's own work force, or the DBE subcontracts a greater portion of the work of a contract than would be expected on the basis of normal industry practice for the type of work involved, VDOT will presume that the DBE is not performing a commercially useful function and such participation will not be counted toward the contract goal.

Factors Used to Determine if a DBE Trucking Firm is Performing a CUF

The following factors will be used to determine whether a DBE trucking company is performing a CUF:

- (1) To perform a CUF the DBE trucking firm shall be completely responsible for the management and supervision of the entire trucking operation for which the DBE is responsible by subcontract on a particular contract. There shall not be a contrived arrangement, including but not limited to any arrangement that would not customarily and legally exist under regular construction project subcontracting practices for the purpose of meeting the DBE contract goal;
- (2) The DBE must own and operate at least one fully licensed, insured, and operational truck used in the performance of the contract work. This does not include a supervisor's pickup truck or a similar vehicle that is not suitable for and customarily used in hauling the necessary materials or supplies;

- (3) The DBE receives full contract goal credit for the total reasonable amount the DBE is paid for the transportation services provided on the contract using trucks the DBE owns, insures, and operates using drivers that the DBE employs and manages;
- (4) The DBE may lease trucks from another certified DBE firm, including from an owner-operator who is certified as a DBE. The DBE firm that leases trucks from another certified DBE will receive credit for the total fair market value actually paid for transportation services the lessee certified DBE firm provides on the contract;
- (5) The DBE may also lease trucks from a non-DBE firm, including an owner-operator. The DBE who leases trucks from a non-DBE is entitled to credit for the total value of the transportation services provided by non-DBE lessees, not to exceed the value of transportation services provided by DBE-owned trucks on the contract. For additional participation by non-DBE lessees, the DBE will only receive credit for the fee or commission it receives as a result of the lease arrangement.

EXAMPLE: DBE Firm X uses two (2) of its own trucks on a contract. The firm leases two (2) trucks from DBE Firm Y and six (6) trucks from non-DBE Firm Z. DBE credit would be awarded for the total transportation services provided by DBE Firm X and DBE Firm Y, and may also be awarded for the total value of transportation services by four (4) of the six (6) trucks provided by non-DBE Firm Z. In all, full DBE credit would be allowed for the participation of eight (8) trucks. With respect to the other two trucks provided by non-DBE Firm Z, DBE credit could be awarded only for the fees or commissions pertaining to those trucks that DBE Firm X receives as a result of the lease with non-DBE Firm Z.

- (6) For purposes of this section, the lease must indicate that the DBE firm leasing the truck has exclusive use of and control over the truck. This will not preclude the leased truck from working for others during the term of the lease with the consent of the DBE, provided the lease gives the DBE absolute priority for and control over the use of the leased truck. Leased trucks must display the name and identification number of the DBE firm that has leased the truck at all times during the life of the lease.

VDOT Makes Final Determination On Whether a CUF Is Performed

VDOT has the final authority to determine whether a DBE firm has performed a CUF on a federal-aid contract. To determine whether a DBE is performing or has performed a CUF, VDOT will evaluate the amount of work subcontracted by that DBE firm or performed by other firms and the extent of the involvement of other firms' forces and equipment. Any DBE work performed by the Contractor or by employees or equipment of the Contractor may be subject to disallowance under the DBE Program, unless the independent validity and need for such an arrangement and work is demonstrated.

Verification of DBE Participation and Imposed Damages.

Within fourteen days after contract execution, the Contractor shall submit to the Engineer a fully executed subcontract agreement for each DBE used to claim credit in accordance with the requirements stated on Form C-112. The subcontract agreement shall be executed by both parties stating the work to be performed, the details or specifics concerning such work and the price which will be paid to the subcontractor. Because of the commercial damage that the Contractor and its DBE subcontractor could suffer if their subcontract pricing, terms, and conditions were known to competitors, the Department staff shall treat subcontract agreements as proprietary Contractor trade secrets with regard to Freedom of Information Act requests. In lieu of subcontract agreements, purchase orders may be submitted for haulers, suppliers, and manufacturers. Such purchase orders must contain, as a minimum, the following information: authorized signatures of

both parties; description of the scope of work to include contract item numbers, quantities, and prices; and required federal contract provisions.

The Contractor shall also furnish, and shall require each subcontractor to furnish, information relative to all DBE involvement on the project for each month during the life of the contract in which participation occurs and verification is available. The information shall be indicated on Form C-63 and certified on Form C-63A, or by copies of cancelled checks with appropriate identifying notations. Failure to provide the forms to the Engineer by the Contractor's monthly progress estimate date may result in delay of approval of the Contractor's monthly progress estimate for payment. The names and certification numbers of DBE firms provided by the Contractor on the various forms indicated in this Special Provision shall be exactly as shown on the Department's latest list of certified DBEs. Signatures on all forms indicated herein shall be those of authorized representatives of the bidder as shown on Form C-32 or Form C-32A, or authorized by letter from the bidder. If certified DBE firms are used which have not been previously documented with the Contractor's bid and for which the Contractor now desires to claim credit toward the project goal, the Contractor shall be responsible for submitting necessary documentation in accordance with the procedures stipulated in this Special Provision to cover such work prior to the DBE beginning work.

The Contractor shall submit to the Engineer its progress schedule as required by Section 103.06 of the Specifications or other such specific contract scheduling specification that may include contractual milestones, i.e., monthly or VDOT requested updates. The Contractor shall include a narrative of applicable DBE activities relative to work activities of the Contractor's progress schedule, including the approximate start times and durations of all DBE participation to be claimed for credit that shall result in full achievement of the DBE goal required in the contract.

On contracts awarded on the basis of good faith efforts, narratives or other agreeable format of schedule information requirements and subsequent progress determination shall be based on the commitment information shown on the latest Form C-111 as compared with the appropriate Form C-63.

Prior to beginning any major component or quarter of the work, as applicable, in which DBE work is to be performed, the Contractor shall furnish a revised Form C-111 showing the name(s) and certification number(s) of any currently certified DBEs not previously submitted who will perform the work during that major component or quarter for which the Contractor seeks to claim credit toward the contract DBE goal. The Contractor shall obtain the prior approval of the Department for any assistance it may provide to the DBE beyond its existing resources in executing its commitment to the work in accordance with the requirements listed in the **Good Faith Efforts Described** section of this Special Provision. If the Contractor is aware of any assistance beyond a DBE's existing resources that the Contractor, or another subcontractor, may be contemplating or may deem necessary and that have not been previously approved, the Contractor shall submit a new or revised narrative statement for VDOT's approval prior to assistance being rendered.

If the Contractor fails to comply with correctly completing and submitting any of the required documentation requested by this provision within the specified timeframes, the Department will withhold payment of the monthly progress estimate until such time as the required submissions are received VDOT. Where such failures to provide required submittals or documentation are repeated the Department will move to enjoin the Contractor and any prime contractual affiliates, as in the case of a joint venture, from bidding as a prime Contractor, or participating as a subcontractor on VDOT projects until such submissions are received.

Documentation Required for Semi-final Payment.

On those projects nearing completion, the Contractor must submit Form C-63 and appropriate Form C-63A(s) marked "Semi-Final" within twenty (20) days after the submission of the last

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regular monthly progress estimate to the Engineer. The forms must include each certified DBE used on the contract work and the work performed by each certified DBE. The forms shall include the actual dollar amount paid to each certified DBE for the accepted creditable work on the contract and monies owed the certified DBE subcontractor. The forms shall be certified under penalty of perjury, or other applicable law, to be accurate and complete. VDOT will use this certification and other information available to determine applicable DBE credit allowed to date by VDOT and the extent to which the DBEs were fully paid for that work. The Contractor shall acknowledge by the act of filing the forms that the information is supplied to obtain payment regarding a federal participation contract. A letter of certification, signed by both the prime Contractor and appropriate certified DBEs, will accompany the forms, indicating the amount, including any retainage that remains to be paid to the certified DBE(s).

Documentation Required for Final Payment.

On those projects that are complete, the Contractor shall submit a final Form C-63 and Form C-63A(s) marked "Final" to the Engineer within thirty (30) days of final acceptance. The forms must include each certified DBE used on the contract and the work performed by each DBE. The forms shall include the actual dollar amount paid to each DBE for the creditable work on the contract and monies owed the DBE subcontractor. VDOT will use these forms and other information available to determine if the Contractor and DBEs have satisfied the DBE contract goal percentage specified in the contract and the extent to which the DBEs were paid for that work. The Contractor shall acknowledge by the act of signing and filing the forms that the information is supplied to obtain payment regarding a federal participation contract.

Prompt Payment Requirements.

The Contractor shall make prompt and full payment to the subcontractor(s) of any retainage held by the prime Contractor after the subcontractor's work is satisfactorily completed.

For purposes of this Special Provision, a subcontractor's work is satisfactorily completed when all the tasks called for in the subcontract have been accomplished, documented, and accepted as required by the contract documents by VDOT. When VDOT has made partial acceptance of a portion of the prime contract, the Department will consider the work of any subcontractor covered by that partial acceptance to be satisfactorily completed. Payment will be made in accordance with the requirements of Section 107.01, Section 109.08(a), and Section 109.10 of the Specifications.

Upon VDOT's payment of the subcontractor's portion of the work as shown on the monthly progress estimate and the receipt of payment by the Contractor for such work, the Contractor shall make compensation in full to the subcontractor for that portion of the work satisfactorily completed and accepted by the Department. For the purposes of this Special Provision, payment of the subcontractor's portion of the work shall mean the Contractor has issued payment in full, less agreed upon retainage, if any, to the subcontractor for that portion of the subcontractor's work that VDOT paid to the Contractor on the monthly progress estimate.

The Contractor shall make payment of the subcontractor's portion of the work within seven (7) days of the receipt of payment from VDOT in accordance with the requirements of Section 109.08(b) of the Specifications.

If the Contractor fails to make payment of the subcontractor's portion of the work within the timeframe specified herein, the subcontractor shall contact the Engineer and the Contractor's bonding company in writing. The bonding company and VDOT will investigate the cause for non-payment and, barring mitigating circumstances that would make the subcontractor ineligible for payment, ensure payment in accordance with the requirements of Section 109.08(b) of the Specifications.

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The Department will withhold payment of the Contractor's monthly progress estimates until the Contractor ensures that the subcontractors have been promptly paid for the work that they have performed successfully and for which the Department has accepted and paid the Contractor.

By bidding on this contract, and by accepting and executing this contract, the Contractor agrees to assume these contractual obligations, and to bind the Contractor's subcontractors contractually to those prompt payment requirements.

Nothing contained herein shall preclude the Contractor from withholding payment to the subcontractor in accordance with the terms of the subcontract in order to protect the Contractor from loss or cost of damage due to a breach of agreement by the subcontractor.

Data Collection

In accordance with 49CFR Section 26.11, all firms bidding on prime contracts and bidding or quoting subcontracts on federal-aid projects shall provide the following information to the Contract Engineer annually.

- Firm name;
- Firm address;
- Firm's status as a DBE or non-DBE;
- The age of the firm; and
- The annual gross receipts of the firm.

The above information can be submitted by means of the Annual Gross Receipts Survey as required in the Prequalification/Certification application.

All bidders, including DBE prime Contractor bidders, shall complete and submit to the Contract Engineer the Subcontractor/Supplier Solicitation and Utilization Form C-48 for each bid submitted within ten (10) days after the bid opening. Failure of bidders to submit this form in the timeframe specified will be cause for rejection of the bid.

Summary of Remedies Available to VDOT

Failure of any bidder\Contractor to comply with the requirements of this Special Provision for Section 107.15 of the Virginia Road and Bridge Specifications, which is deemed to be a condition of bidding, or where a contract exists, is deemed to constitute a breach of contract shall be remedied in accordance with the following:

Disadvantaged Business Enterprise (DBE) Program Requirements.

All administrative remedies noted in this provision are automatic unless the Contractor exercises the right of appeal within the required timeframe(s) specified herein.

DBE Program-related Certifications Made by Bidders\Contractors

Bids will be considered non-responsive and will be rejected for failure to comply with the requirements of this Special Provision and the contract specifications. Where a contract exists and where the Contractor, a DBE or any other firm retained by the Contractor has failed to comply with federal or VDOT DBE Program regulations and/or their requirements on that contract, VDOT has the authority and discretion to determine the extent to which the DBE contract goals have not been met, and will assess against the Contractor any remedies available at law or provided in the contract in the event of such a contract breach.

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Bid Rejection

The failure of bidders to submit the required documentation within the timeframes specified in the Contract Goal, Good Faith Efforts Specified section of this Special Provision may be cause for rejection of the bid.

If the lowest bidder is rejected for failure to submit required documentation, the Department may either award the work to the next lowest bidder, or re-advertise and construct the work under contract or otherwise as determined by the Commonwealth Transportation Board (CTB).

Documentation and Administrative Reconsideration of Good Faith Efforts**During Bidding**

Regardless of the DBE contract goal participation level proposed by the bidder or the extent of good faith efforts shown, all bidders shall timely and separately file their completed and executed Forms C-111 and C-112 and good faith efforts as aforementioned or face potential bid rejection. If a bidder does not submit its completed and executed C-111 or C-112 when required by this Special Provision the bidder's bid will be considered non-responsive and will be rejected.

If, after reconsideration, the Department determines the bidder has failed to meet the requirements of the contract goal and has failed to make adequate good faith efforts to achieve the level of DBE participation as specified in the bid proposal, the bidder's bid will be rejected.

If sufficient documented evidence is presented to demonstrate that the apparent low bidder made reasonable good faith efforts, the Department will award the contract and reduce the DBE requirement to the actual commitment identified by the lowest successful bidder at the time of its bid. However, such action will not relieve the Contractor of its responsibility for complying with the reduced DBE requirement during the life of the contract or any administrative sanctions as may be appropriate.

During the Contract

If the Contractor fails upon completion of the project to meet the required participation, the Contractor and any prime contractual affiliates, as in the case of a joint venture, may be enjoined from bidding as a prime Contractor, or participating as a subcontractor on VDOT projects for a period of 90 days.

Verification of DBE Participation and Imposed Damages for Non-compliance

If the Contractor fails to comply with correctly completing and submitting any of the required documentation requested by this provision within the specified timeframes, the Department will withhold payment of the monthly progress estimate until such time as the required submissions are received by VDOT. Where such failures to provide required submittals or documentation are repeated, the Department will move to enjoin the Contractor and any prime contractual affiliates, as in the case of a joint venture, from bidding as a prime Contractor, or participating as a subcontractor on VDOT projects until such submissions are received.

Prompt Payment Requirements

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The Department will withhold payment of the Contractor's monthly progress estimates until the Contractor ensures that the subcontractors have been promptly paid for the work that they have performed successfully, and for which the Department has accepted and paid the Contractor.

In addition to the remedies described heretofore in this provision VDOT also exercises its rights with respect to the following remedies:

Suspect Evidence of Criminal Behavior.

Failure of a bidder, Contractor, or subcontractor to comply with the Virginia Department of Transportation Road and Bridge Specifications and these Special Provisions wherein there appears to be evidence of criminal conduct shall be referred to the Attorney General for the Commonwealth of Virginia and/or the FHWA Inspector General for criminal investigation and, if warranted, prosecution.

Suspected DBE Fraud

In appropriate cases, VDOT will bring to the attention of the U. S. Department of Transportation (USDOT) any appearance of false, fraudulent, or dishonest conduct in connection with the DBE program, so that USDOT can take the steps, e.g., referral to the Department of Justice for criminal prosecution, referral to the USDOT Inspector General, action under suspension and debarment or Program Fraud and Civil Penalties rules provided in 49CFR Part 31.

GUIDELINES — PROJECTS REQUIRING RAILROAD INSURANCE.**S107I00-0708**

VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISIONS FOR
SECTION 107.19—RAILWAY - HIGHWAY PROVISIONS

January 14, 2008

Rte. _____ Project _____

SECTION 107.19—RAILWAY - HIGHWAY PROVISIONS of the Specifications is amended as follows:**Section 107.19—Railway - Highway Provision** is amended to include the following:

The Contractor shall notify the _____ of
the _____ Railway Company,

(City or Town) (State) (Zip)
_____ at least _____ hours before starting any work on or over the Railway
(Telephone No.) (No.)
right-of-way. A vertical clearance above the highest rail of at least _____ feet
and a horizontal clearance from the centerline of the track of at least _____ feet
shall be maintained, unless otherwise authorized by the Railway Company. The approximate
number and type of trains per day per track is as follows:

Track	_____	_____	_____	Track	_____	_____	_____
Track	_____	_____	_____	Track	_____	_____	_____
Track	_____	_____	_____	Track	_____	_____	_____

Upon starting work a slow order of _____ will be in effect.

The following Railway utilities are known to be on the Railway's right of way:

The Contractor shall promptly notify the Railway's duly authorized representative as noted above of any loss, damage, injury or death arising out of or in connection with the project work performed on or over the Railway right-of-way.

Section 107.19(a)—Flagger or Watchperson Services is amended to include the following:

The Contractor shall coordinate all construction operations on or over railway right-of-way with the Railway Company and make all arrangements for necessary flagger and watchperson service. Any flaggers or watchpersons required by the Railway Company for the safety of railway operations, because of work being performed by the Contractor or incidental thereto, will be provided by the Railway Company. No work shall be undertaken on or over the Railway right-of-way until the watchpersons or flaggers are present at the project site.

Flagger or watchperson service will be required whenever work is accomplished within _____ feet of the railroad's track or whenever any machinery or heavy equipment encroaches within _____ feet of the track. Also, flagger or watchperson service will be required

whenever construction activities endanger the railroad signal and communication facilities. The jacking or boring of pipes or utility lines under the track will also require flagger service.

Contractor shall provide flaggers with a heated shelter and suitable sanitation facility.

To procure or terminate flagger or watchperson services, the Contractor shall notify in writing,

Name _____
Title _____
Address _____
Telephone No. _____

On projects that will require these services for longer than a 30 day duration, it will require the posting of the position in accordance with union regulations. Consequently, it will require _____ days before a flagger can be assigned to the project. To terminate the service, it is necessary to allow _____ weeks from the receipt of such notification.

For flagger or watchperson services of less than _____ days duration, you must provide a _____ day advance notification. For termination of this service, allow _____ days from the receipt of the notification.

The Department has estimated that _____ hours of flagging service will be required for this project. If the Department is required to reimburse the Railway Company for cost of flagging service in excess of the cost associated with the established hours, the amount of excess will be deducted from monies due the Contractor.

Sections 107.19 (c) 1. and 107.19 (c) 2. are replaced by the following:

Contractor's public liability and property damage insurance: With respect to operations performed by the contractor, this insurance shall provide coverage with a combined single limit of not less than _____ each occurrence for bodily injury and/or property damage liability. This insurance shall include explosion, collapse, and underground hazard coverage. If the Contractor subcontracts any portion of the work, the Contractor shall also secure insurance protection in its own behalf under its Public Liability and Property Damage Insurance policies to cover any liability imposed on him by law for damages because of bodily injury and/or property damage liability as a result of work undertaken by the subcontractor(s). A certificate of insurance shall be provided to the railway company as evidence that the Contractor has in full force and effect the insurance coverage hereinbefore specified. Said certificate shall provide railway company with at least 30 days advance written notice of any material change in or cancellation of the required policies.

Railroad protective liability insurance: With respect to the operations the Contractor or any of its subcontractors perform, the Contractor must provide in the name of the railway company a policy providing coverage with a combined single limit of _____ each occurrence and _____ aggregate for bodily injury and property damage. This policy shall be written on the ISO/RIMA Form of Railroad Protective Insurance or its equivalent. The original of the policy shall be submitted to the Department for the railway company's approval and retention.

GUIDELINES — THE CATEGORY OF PROGRESS SCHEDULE TO BE USED ON A PARTICULAR PROJECT IS DETERMINED BY THE PROJECT MANAGER (PM) FOR THAT PROJECT (SEE CD-2008-14). NOTE: ANY PROJECT-SPECIFIC SPs OR SPCNs RELATED TO PROGRESS SCHEDULES MUST BE REVIEWED AND APPROVED BY THE PROJECT PM AND STATE SCHEDULING ENGINEER. [Contact State Scheduling Engineer, Frank Gbinije (804) 786-2980, for clarification if project usage is unclear.] EXCEPTIONS: DO NOT USE ON EMERGENCY CONTRACT (See S100EE0 Emergency Contract Projects) OR ON-CALL PROJECTS (See c103gg0 No Progress Schedule Required).

S108A01-0808

VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION FOR
PROGRESS SCHEDULE FOR CATEGORY I PROJECTS

April 28, 2008

Section 103.06(e) Progress Schedule of the Specifications is deleted and replaced by this provision.

Section 108.03 Progress Schedule General Requirements of the Specifications is deleted and replaced by this provision.

I. GENERAL REQUIREMENTS

The Contractor shall plan and schedule the work and shall submit his initial plan in the form of a Baseline Progress Schedule for the Engineer's review and acceptance. Upon acceptance, the Progress Schedule shall become the project Schedule of Record (SOR). The SOR shall be used by the Engineer for planning and coordination of the Department activities, and for evaluation of the Contractor's progress and the effects of time-related impacts on the project.

Prior to preparing the schedule, the Engineer or the Contractor may request a schedule development planning meeting to discuss any project specific items required for preparation of the progress schedule. The Contractor shall prepare and submit a practicable schedule to reflect a logical progress of the work. The Progress Schedule shall represent the Contractor's overall work plan to accomplish the entire scope of work in accordance with the requirements of the Contract. It shall include all items of work required for coordination and inspection and to show progress of the work including, but not limited to the controlling items of work and other relevant time-based tasks required for timely completion of the work, including as applicable, the work to be performed by sub-contractors, suppliers, the Department, and/or others. When preparing the schedule, the Contractor shall consider all known constraints and restrictions such as holidays, seasonal, weather, traffic, utility, railroad, right-of-way, environmental, permits, or other limitations to the work.

The Contractor may be required, as determined by the Engineer, to attend a pre-construction scheduling conference. If required, the scheduling conference may be held in conjunction with the pre-construction conference or at a separate meeting called by the Engineer. The Contractor shall be prepared to discuss his planned or contemplated operations relative to the contract requirements and this special provision. Until the Baseline Progress Schedule is accepted by the Engineer, the Contractor shall keep the Engineer informed of his planned or contemplated operations on a continuing basis.

II. PROGRESS SCHEDULE SUBMITTAL REQUIREMENTS

Baseline Progress Schedule – The Contractor shall submit to the Engineer his initial progress schedule in the form of a Baseline Progress Schedule at least seven (7) calendar days prior to

*These SPECIFICATIONS REVISIONS are subject to change on short notice.

beginning work. The Baseline Progress Schedule shall include a written Progress Schedule Narrative and a Progress Earnings Schedule. Progress Earnings Schedules will not be required for projects with contract duration of sixty (60) calendar days or less. The Contractor shall submit three (3) sets of the written Progress Schedule Narrative and the Progress Earnings Schedule as defined herein:

1. Progress Schedule Narrative: The Progress Schedule Narrative shall consist of the following written information:
 - a) A description of the Contractor's overall plan of operations including the planned procedures and crew(s) required to complete each feature or major operation;
 - b) A Tabular Schedule to establish milestone(s) for completing each phase or stage of work, feature, major traffic switch, and other key milestone dates as specified in the Contract or required to assess progress of the work. The schedule shall also indicate the planned sequence and start/finish dates for each operation, maintenance of traffic (MOT) activities, and other relevant time-based tasks required to complete the work;
 - c) A discussion on the proposed working calendar to indicate the number of working days per week as well as the anticipated number of non-working days per month with considerations for known constraints or restrictions; (i.e. normal weather, traffic, holidays, time of year, utility, etc.);
 - d) A description of any potential issues that may impact the schedule.
2. Progress Earnings Schedule: The Progress Earnings Schedule shall be prepared on the Form C-13C. The Progress Earnings Schedule shall indicate the Contractor's anticipated cumulative percent complete for each month as of the Contractor's progress estimate date as defined in Section 109.08(a) of the Specifications. The anticipated cumulative percent complete shall be based on the anticipated cumulative progress earnings relative to the total contract value. Total contract value will be considered to mean the original amount of the contract including any authorized adjustments for changes to the work in accordance with, but not limited to, the provisions of Sections 109.04 and 109.05 of the Specifications. Anticipated payments for Material on Hand in accordance with Section 109.09 of the Specifications or for other adjustments including asphalt, fuel, retainage, liquidated damages, incentives, disincentives, etc., will not be considered in the Progress Earnings Schedule.

Revised Progress Schedule - A Revised Progress Schedule will be required when:

- The Contractor proposes to revise his work plan. (The Contractor may revise his Progress Schedule at any time at his discretion.)
- The Engineer determines the Contractor's work plan or the progress of the work differs or deviates significantly from the SOR. Differs or deviates significantly will be construed to mean major deviations from the SOR that will affect the schedule milestone(s), progress earnings, or project completion.
- The Engineer issues a written request for changes or a directive for changes
- Any of the above conditions impacts or will impact the progress earnings or scheduled dates of any project milestones including project completion

Examples of changes, relative to the above, that will prompt the Engineer to require a Revised Progress schedule include but are not limited to: major deviations from the SOR such as changes to phasing, changes to the general sequence, changes to the proposed method or means, additions or deletions to the work, unanticipated changes deemed beyond the Contractor's control such as those caused by other parties (utilities and railroads) or changes as defined in Section 104 of the Specifications.

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When required by the Engineer, the Contractor shall submit the Revised Progress Schedule within ten (10) calendar days of receipt of the Engineer's written request. The Revised Progress Schedule shall be prepared and submitted in the form of a Baseline Progress Schedule; however, it shall reflect the actual progress of accomplished work, including actual dates for completed work or work in progress, any impact of a change, and the proposed plan for completing the remaining work. The Revised Progress Schedule submittal will be reviewed by the Engineer for acceptance as specified herein.

Failure to Furnish Progress Schedules – Work shall not commence until the Contractor submits his complete Baseline Progress Schedule in accordance with the requirements of this special provision, unless otherwise approved in writing by the Engineer.

Delays in work resulting from the Contractor's failure to provide the progress schedule will not be considered just cause for extension of the contract time limit or for additional compensation.

III. REVIEW AND ACCEPTANCE

The Engineer will review all progress schedule submittals within seven (7) calendar days of receipt of the Contractor's complete submittal. The progress schedule submittal shall be considered complete only when all required submittal items and schedule information as defined herein are provided. Acceptance by the Engineer will be based on completeness and conformance with the requirements of this provision and the Contract. Such contract requirements may include phasing, sequence of construction, Maintenance of Traffic (MOT), interim milestone(s), or other specified constraints or restrictions.

If the Contractor's progress schedule is deemed to be unacceptable, the Engineer will issue a written notification of non-conformance or incompleteness with a request for resubmission. The Engineer's response will include comments describing the deficiencies prompting the Engineer's decision.

If the Contractor's progress schedule is deemed to be acceptable, the Engineer will issue a written notice of acceptance that may include comments or concerns on the schedule or a request for clarification. When the Engineer's responses include any comments, concerns, or requests for clarification, the Contractor shall respond accordingly within seven (7) calendar days of receipt of the Engineer's response. Failure on the part of the Contractor to respond to the Engineer may adversely affect the Engineer's ability to completely evaluate the Contractor's schedule.

Upon acceptance, the Progress Schedule will become the Schedule of Record (SOR) and will replace any previous SOR. For the purposes of this Special Provision the SOR is defined as the currently accepted progress schedule by which all schedule references will be made and progress will be compared. The SOR will be basis for evaluating the effects of any time-related changes or impacts on the work.

Review and acceptance by the Engineer will not constitute a waiver of any contract requirements and will in no way assign responsibilities of the work plan, scheduling assumptions, and validity of the schedule to the Department. Failure of the Contractor to include in the Progress Schedule any element of work required by contract for timely completion of the project shall not excuse the Contractor from completing the entire scope of work within the contract specified completion milestone(s).

IV. MONITORING THE WORK AND ASSESSING PROGRESS

*These SPECIFICATIONS REVISIONS are subject to change on short notice.

Monitoring The Work – The Engineer will monitor the work regularly to identify any deviations from the Contractor's scheduled performance relative to the SOR. The Engineer may request a meeting with the Contractor to discuss the Contractor's current progress or to review the approximate date for starting each critical inspection stage during the following thirty (30) calendar days. At least once a week, the Contractor shall advise the Engineer of the approximate timing for anticipated critical stages for the subsequent week. The Engineer shall be advised at least twenty-four (24) hours in advance of any changes in the Contractor's planned operations or critical stage work requiring Department inspection.

Progress Evaluation – Progress will be evaluated by the Engineer at the time of the monthly progress estimate relative to the currently accepted Baseline or Revised Progress Schedule. The Contractor's actual progress may be considered unsatisfactory if any of the following conditions occurs:

1. The actual Total earnings to date percentage for work completed is more than ten (10) percentage points behind the cumulative earnings percentage for work scheduled; or
2. Any interim milestone is later than the scheduled milestone by fourteen (14) calendar days or the projected project completion date is later than the contract completion date by fourteen (14) calendar days or ten (10) percent of the contract duration, whichever is less.

Progress Deficiency and Schedule Slippage – When the Contractor's actual progress is trending toward unsatisfactory status, the Engineer will encourage the Contractor to meet to specifically and substantially discuss reversing this trend and the steps he is taking to recover satisfactory progress.

When the Contractor's actual progress is deemed to be unsatisfactory as defined by any of the conditions listed under **Progress Evaluation** of this provision, the Engineer will issue a written notice of unsatisfactory performance to advise the Contractor that five (5) percent retainage of the monthly progress estimate is being withheld and will continue to be withheld as described in Section 109.08(c) of the Specifications, for each month the Contractor's actual progress is determined to be unsatisfactory. When the Contractor fails to respond with good faith efforts as described herein to restore satisfactory progress, the Engineer may issue a notice to indicate that he will recommend to the State Contract Engineer or State Construction Engineer that the Contractor be temporarily disqualified from bidding on contracts with the Department as described in Section 102.08 of the Specifications, if progress remains unsatisfactory at the time of preparation of the next monthly progress estimate following the Engineer's notice. Prior to recommendation for removal from the list of pre-qualified bidders, the Engineer will allow the Contractor fourteen (14) calendar days from the date of the notice to respond. As an example of good faith efforts the Contractor may submit to the Engineer, a proposed recovery plan in the form of a Revised Progress Schedule and a written statement to describe the Contractor's proposed actions and timeframe to correct the progress deficiency or schedule slippage. The Contractor may also submit to the Engineer a written explanation and supporting documentation to establish that such delinquency was attributable to conditions beyond his control. Any schedule revisions resulting from a recovery plan will be reviewed in accordance with Section III, but shall not replace the current SOR.

When the Engineer determines the Contractor's progress is again satisfactory, the five (5) percent retainage previously withheld will be released to the Contractor in accordance with the provisions of Section 109.08 (c) of the Specifications.

If the Contractor is temporarily disqualified from bidding on contracts with the Department, the Contractor will not be reinstated until either the Engineer deems that his progress has improved to the extent that the work can be completed within the contract time limit or the project has received final acceptance in accordance with the provisions of Section 108.09 of the Specifications.

V. MEASUREMENT AND PAYMENT

Category I progress schedule submittals including the baseline and any subsequent revisions requested by the Engineer as described herein, will not be measured or paid for separately. All associated costs to prepare, revise, and/or furnish the progress schedules for Category 1 projects in accordance with the requirements herein shall be considered incidental to the work.

GUIDELINES — THE CATEGORY OF PROGRESS SCHEDULE TO BE USED ON A PARTICULAR PROJECT IS DETERMINED BY THE PROJECT MANAGER (PM) FOR THAT PROJECT (SEE CD-2008-14). NOTE: ANY PROJECT-SPECIFIC SPs OR SPCNs RELATED TO PROGRESS SCHEDULES MUST BE REVIEWED AND APPROVED BY THE PROJECT PM AND STATE SCHEDULING ENGINEER. [Contact State Scheduling Engineer, Frank Gbinije (804) 786-2980, for clarification if project usage is unclear.] EXCEPTIONS: DO NOT USE ON EMERGENCY CONTRACT (See S100EE0 Emergency Contract Projects) OR ON-CALL PROJECTS (See c103gg0 No Progress Schedule Required).

S108B00-0808

VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION FOR
PROGRESS SCHEDULE FOR CATEGORY II PROJECTS

April 29, 2008

Section 103.06(e) Progress Schedule of the Specifications is deleted and replaced by this provision.

Section 108.03 Progress Schedule of the Specifications is deleted and replaced by this provision.

I. GENERAL REQUIREMENTS

The Contractor shall plan and schedule the work and shall submit his initial plan in the form of a Baseline Progress Schedule for the Engineer's review and acceptance. Upon acceptance, the Progress Schedule shall become the project Schedule of Record (SOR). The Contractor shall maintain the SOR regularly to ensure that the schedule continues to represent the Contractor's current actual work plan and progress. The SOR shall be used by the Engineer for planning and coordination of the Department activities, and for evaluation of the Contractor's progress and the effects of impacts on the project.

Prior to preparing the schedule, the Engineer or the Contractor may request a schedule development planning meeting to discuss any project specific items required for preparation of the progress schedule. The Contractor shall prepare and submit a practicable schedule to reflect a logical progress of the work. The Progress Schedule shall represent the Contractor's overall work plan to accomplish the entire scope of work in accordance with the requirements of the Contract. It shall include all items of work required for coordination and inspection and to show progress of the work including, but not limited to the controlling items of work and other relevant time-based tasks required for timely completion of the work, including as applicable, the work to be performed by sub-contractors, suppliers, the Department, and/or others. When preparing the schedule, the Contractor shall consider all known constraints and restrictions such as holidays, seasonal, weather, traffic, utility, railroad, right-of-way, environmental, permits, or other limitations to the work.

The Contractor may be required, as determined by the Engineer, to attend a scheduling conference. If required, the scheduling conference may be held in conjunction with the pre-construction conference or at a separate meeting called by the Engineer. The Contractor shall be prepared to discuss his planned or contemplated operations relative to the contract requirements and this special provision. Until the Baseline Progress Schedule is accepted by the Engineer, the Contractor shall keep the Engineer informed of his planned or contemplated operations on a continuing basis.

II. PROGRESS SCHEDULE SUBMITTAL REQUIREMENTS

Baseline Progress Schedule – The Contractor shall submit to the Engineer his initial progress schedule in the form of a Baseline Progress Schedule at least seven (7) calendar days prior to beginning work. The Baseline Progress Schedule submittal shall include three (3) sets of the written Progress Schedule Narrative, Bar-Chart Progress Schedule, and the Progress Earnings Schedule; as

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well as two (2) sets of data compact disks containing the electronic working files of the Bar-Chart Progress Schedule and Progress Earnings Schedule as specified below:

1. Progress Schedule Narrative: The Progress Schedule Narrative shall consist of the following written information:
 - a) A description of the Contractor's overall plan of operations in terms of:
 - i) The proposed overall sequence of construction;
 - ii) The general procedures for completing each feature or major operation;
 - iii) Planned resources in terms of number and types of crew and equipment;
 - iv) Anticipated daily production rates for each major operation;
 - b) A Tabular Milestone Schedule to establish interim milestones to complete each phase or stage of work, feature, major traffic switch, or other milestone dates specified in the Contract or required to assess progress of the work;
 - c) A description of the proposed working calendar to indicate the number of work days per week, number of shifts per day, and number of hours per day as well as the anticipated number of non-working days per month with considerations for:
 - i) Holidays;
 - ii) Normal weather conditions;
 - iii) Known constraints and restrictions (i.e. traffic, local events, time of year, environmental, permits, utility, etc.);
 - d) A description of any potential issues that may impact the schedule.
2. Bar-Chart Progress Schedule: The Bar-Chart Progress Schedule shall be submitted in a format wholly compatible with Microsoft Excel or the latest Primavera project and program management software with the capability to import and export project data in the Primavera proprietary exchange format (XER). The Bar-Chart schedule shall be time-scaled and shall show the following:
 - a) A listing of activities to represent the major categories of work and the related time-based tasks required for timely completion of each feature, including but not limited to the controlling items of work. Each activity shall contain the following schedule properties:
 - i) Activity Identification;
 - ii) Activity Description;
 - iii) Original Duration (total anticipated number of days to complete the activity);
 - iv) Remaining Duration (remaining number of days required to complete the activity shall equal the original duration for activities that have not started);
 - v) Planned Start and Finish Dates;
 - vi) Critical Dates (must start by or finish by dates) for the critical activities;
 - vii) Percent Complete;
 - b) Activity bars shall be sequenced according to their relationship to time, other activities, and in order of the intended sequence of progress;
 - c) The Bar-Chart Schedule shall allow for sufficient space for an additional plot per activity for comparison of the actual progress to the baseline schedule.

3. Progress Earnings Schedule: The Progress Earnings Schedule shall be submitted on the Department electronic Form C-13C template. The Progress Earnings Schedule shall be prepared in accordance with the following:
 - a) The Progress Earnings Schedule shall indicate the Contractor's anticipated cumulative percent complete for each month as of the Contractor's progress estimate date as defined in Section 109.08(a) of the Specifications;
 - b) It shall be based on the dollar value of the work to be completed each month as depicted on the Bar-Chart Schedule;
 - c) The anticipated cumulative percent complete shall be based on the anticipated cumulative progress earnings relative to the total contract value. Total contract value will be considered to mean the original amount of the contract including any authorized adjustments for changes to the work in accordance with, but not limited to, the provisions of Sections 109.04 and 109.05 of the Specifications;
 - d) Anticipated payments for Material on Hand in accordance with Section 109.09 of the Specifications or for other adjustments including asphalt, fuel, retainage, incentives, disincentives, etc., will not be considered in the Progress Earnings Schedule;
 - e) The Progress Earnings Schedule shall include a plot of the anticipated monthly cumulative earnings progress curve.

Progress Schedule Update – The Contractor shall on a monthly basis submit for the Engineer's review and acceptance the Contractor's Progress Schedule Update within five (5) working days after the Contractor's progress payment estimate cut-off date. The Contractor shall update the Bar-Chart and Progress Earnings Schedule to reflect the actual progress of accomplished work and the proposed plan for completing the remaining work as of the progress payment estimate cut-off date. The Progress Schedule Update submittal shall include three (3) sets of the printed copies and two (2) sets of data compact disks containing the electronic working files of the Bar-Chart Progress Schedule and Progress Earnings Schedule Update as defined below:

1. Bar-Chart Progress Schedule Update: The Bar-Chart Progress Schedule Update shall be based on the currently accepted Bar-Chart Progress Schedule and shall show the following:
 - a) Actual start/finish dates for completed activities, actual start/planned finish dates for on-going activities, and planned start/finish dates for the remaining activities.
 - b) Remaining duration for unfinished activities shall be based on the amount of time required to complete the remaining work;
 - c) Activity percent complete for work-in-place shall be based on the amount of work completed relative to the total amount of work represented by the activity (cumulative actual dollar value of work completed relative to the total allocated contract value for the activity);
 - d) A parallel plot of the Progress Schedule Update activity bars against the currently accepted Baseline Progress Schedule.
2. Progress Earnings Schedule Update: The Progress Earnings Schedule Update shall be based on the currently accepted Progress Earnings Schedule and shall show the following:
 - a) Actual monthly and cumulative earnings for each payment period for work completed and the projected monthly and cumulative earnings for each period for the remaining work;

- b) A plot of the actual and projected cumulative earnings progress curve against the currently accepted Baseline or Revised Progress Earnings curve.

Revised Progress Schedule - A Revised Progress Schedule will be required when:

- The Contractor proposes to revise his work plan. (The Contractor may revise his Progress Schedule at any time at his discretion.)
- The Engineer determines the **Contractor's work plan** or the progress of the work differs or deviates significantly from the SOR. Differs or deviates significantly will be construed to mean major deviations from the SOR that will affect the schedule milestone(s), progress earnings, or project completion.
- The Engineer issues a written request for changes or a directive for changes.
- Any of the above conditions impacts or will impact the progress earnings or scheduled dates of any project milestones including project completion.

Examples of changes, relative to the above, that will prompt the Engineer to require a Revised Progress schedule include but are not limited to: major deviations from the SOR such as changes to phasing, changes to the general sequence, changes to the proposed method or means, additions or deletions to the work, unanticipated changes deemed beyond the Contractor's control such as those caused by other parties (utilities and railroads) or changes as defined in Section 104 of the Specifications.

The Contractor shall submit a **Schedule Impact Analysis (SIA)** for all changes to the work that will impact the schedule, including changes requested by the Engineer or the Contractor. If the Engineer and the Contractor agree changes to the work do not or will not affect or impact the progress schedule, the Engineer will not require a written Schedule Impact Analysis (SIA) be submitted but will require the Contractor to certify in writing that such changes did not impact the schedule.

Schedule Impact Analysis (SIA) – The Contractor will be required, as determined by the Engineer to submit a written Schedule Impact Analysis for any of the following reasons:

1. The Contractor discovers any previously unknown or unanticipated issue that he believes may impact the work plan or schedule; in such cases the Contractor shall notify the Engineer within forty-eight (48) hours of any discovered issues;
2. When the Engineer issues a written request for changes to the work that will impact the work plan or schedule;
3. When the work is impacted by other changes that are deemed by the Engineer to be beyond the control of the Contractor

The written Schedule Impact Analysis (SIA) shall explain the effects of the impact(s) on the Contractor's work plan or schedule; and if appropriate shall substantiate any requests for adjustment of the Contract. Such changes may include, but not be limited to, changes caused by others (i.e. railroads, utilities, etc.) or changes to the work as defined in Section 104 of the Specifications. The Contractor shall submit the written SIA within fourteen (14) calendar days after the finish date of the impact. The written SIA shall include a description of the impact; explanation and justification of the effects of the impact on the work plan or schedule; and a description of any proposed plan to mitigate the effects of the impact. The SIA will be evaluated against the SOR for any adjustments to the Contract in accordance with the provisions of Section 108.04 of the Specifications.

If no SIA is required for changes to the work the Contractor shall submit a Revised Progress Schedule within the timeframe stated below.

When a Revised Progress Schedule is required by the Engineer for revisions in the work plan or schedule or for authorized changes to the Contract, the Contractor shall submit for the Engineer's review and acceptance the Revised Progress Schedule within fourteen (14) calendar days of receipt of the Engineer's written request. The Revised Progress Schedule shall be prepared and submitted in the form of a Baseline Progress Schedule; however, it shall reflect the actual progress of accomplished work as of the submittal date, any impact as a result of the change(s), and the proposed plan for completing the remaining work. The Revised Progress Schedule submittal will be reviewed by the Engineer for acceptance as specified herein. The accepted Revised Progress Schedule shall then replace the previous SOR for the remainder of the work.

Failure to Furnish Progress Schedules – Work shall not commence until the Contractor submits his complete Baseline Progress Schedule in accordance with the requirements of this special provision, unless otherwise approved in writing by the Engineer.

If the Contractor fails to provide an acceptable Baseline Progress Schedule within sixty (60) calendar days from the Contract Notice to Proceed date, a Progress Schedule Update, or if a Revised Progress Schedule is required as specified herein and the Contractor fails to provide such a schedule, the Engineer will delay approval for payment of the Contractor's monthly progress estimate until such time as the Contractor has satisfied the submittal requirements.

Delays resulting from the Contractor's failure to provide the progress schedule in accordance with the requirements set forth herein will not be considered just cause for extension of the contract time limit or for additional compensation.

IV. REVIEW AND ACCEPTANCE

The Engineer will review all progress schedule submittals within seven (7) calendar days of receipt of the Contractor's complete submittal. The progress schedule submittal shall be considered complete only when all required submittal items and schedule information as defined herein are provided. Acceptance by the Engineer will be based on completeness and conformance with the requirements of this provision and the Contract. Such contract requirements may include phasing, sequence of construction, Maintenance of Traffic (MOT), interim milestone(s), or other specified constraints or restrictions.

If the Contractor's progress schedule is deemed to be unacceptable, the Engineer will issue a written notification of non-conformance or incompleteness with a request for resubmission. The Engineer's response will include comments describing the deficiencies prompting the Engineer's decision.

If the Contractor's progress schedule is deemed to be acceptable, the Engineer will issue a written notice of acceptance that may include comments or concerns on the schedule or a request for clarification. When the Engineer's responses include any comments, concerns, or requests for clarification, the Contractor shall respond accordingly within seven (7) calendar days of receipt of the Engineer's response. Failure on the part of the Contractor to respond to the Engineer may adversely affect the Engineer's ability to completely evaluate the Contractor's schedule.

Upon acceptance, the Baseline or Revised Progress Schedule will become the Schedule of Record (SOR) and will replace any previous SOR. For the purposes of this Special Provision the SOR is defined as the currently accepted progress schedule by which all schedule references will be made and progress will be compared. The currently accepted Progress Schedule Update will not replace the SOR, but will be used as the contemporaneous schedule with which to assess current progress, and to evaluate the effects of any time-related changes or impacts on the work.

Review and acceptance by the Engineer will not constitute a waiver of any contract requirements and will in no way assign responsibilities of the work plan, scheduling assumptions, and validity of the

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schedule to the Department. Failure of the Contractor to include in the Progress Schedule any element of work required by the Contract for timely completion of the project will not excuse the Contractor from completing the entire scope of work within the Contract specified completion milestone(s).

IV. MONITORING THE WORK AND ASSESSING PROGRESS

Monitoring The Work – The Engineer will monitor the work regularly to identify any deviations from the Contractor's scheduled performance relative to the SOR. The Engineer may request a meeting with the Contractor to discuss the Contractor's current progress or to review the approximate date for starting each critical inspection stage during the following thirty (30) days. At least once a week, the Contractor shall advise the Engineer of the approximate timing for anticipated critical stages for the subsequent week. The Contractor must advise the Engineer at least twenty-four (24) hours in advance of any changes in the Contractor's planned operations or critical stage work requiring Department inspection.

Progress Evaluation – Progress will be evaluated by the Engineer at the time of the monthly progress estimate relative to the Schedule of Record (SOR). The Contractor's actual progress may be considered unsatisfactory if any of the following conditions occurs:

1. The actual Total earnings to date percentage for work completed is more than ten (10) percentage points behind the cumulative earnings percentage for work scheduled; or
2. Any interim milestone or critical activity completion date is later than the scheduled completion date by more than twenty-one (21) calendar days or ten (10) percent of the contract duration, whichever is less; or
3. The projected project completion date is later than the contract completion date by twenty-one (21) calendar days or ten (10) percent of the contract duration, whichever is less.

Progress Deficiency and Schedule Slippage – When the Contractor's actual progress is trending toward unsatisfactory status, the Engineer will encourage the Contractor to meet to specifically and substantially discuss reversing this trend and the steps he is taking to recover satisfactory progress.

When the Contractor's actual progress is deemed to be unsatisfactory as defined by any of the conditions listed under **Progress Evaluation** of this provision, the Engineer will issue a written notice of unsatisfactory performance to advise the Contractor that five (5) percent retainage of the monthly progress estimate is being withheld and will continue to be withheld as described in Section 109.08(c) of the Specifications, for each month the Contractor's actual progress is determined to be unsatisfactory. When the Contractor fails to respond with good faith efforts as described herein to restore satisfactory progress, the Engineer will issue a notice to indicate that he may recommend the Contractor be temporarily disqualified from bidding on contracts with the Department as described in Section 102.08 of the Specifications, if progress remains unsatisfactory at the time of preparation of the next monthly progress estimate following the Engineer's notice. Prior to recommendation for removal from the list of pre-qualified bidders, the Engineer will allow the Contractor fourteen (14) calendar days from the date of the notice to respond. As an example of good faith efforts, the Contractor may submit to the Engineer, a proposed recovery plan in the form of a Revised Progress Schedule and a written statement to describe the Contractor's proposed actions and timeframe to correct the progress deficiency or schedule slippage. The Contractor may also submit to the Engineer a written explanation and supporting documentation to establish that such delinquency was attributable to conditions beyond his control. Any schedule revisions resulting from a recovery plan will be reviewed in accordance with Section III, but shall not replace the current SOR.

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When the Engineer determines the Contractor's progress is again satisfactory the five (5) percent retainage previously withheld will be released to the Contractor in accordance with the provisions of Section 109.08(c) of the Specifications.

If the Contractor is temporarily disqualified from bidding on contracts with the Department, the Contractor will not be reinstated until either the Engineer deems that his progress has improved to the extent that the work can be completed within the contract time limit or the project has received final acceptance in accordance with the provisions of Section 108.09 of the Specifications.

V. MEASUREMENT AND PAYMENT

Category II progress schedule submittals including the baseline and any subsequent revisions requested by the Engineer as described herein, will not be measured or paid for separately. All associated costs to prepare, update, revise, and/or furnish the progress schedules for Category II projects in accordance with the requirements herein shall be considered incidental to the work.

GUIDELINES — THE CATEGORY OF PROGRESS SCHEDULE TO BE USED ON A PARTICULAR PROJECT IS DETERMINED BY THE PROJECT MANAGER (PM) FOR THAT PROJECT (SEE CD-2008-14). NOTE: ANY PROJECT-SPECIFIC SPs OR SPCNs RELATED TO PROGRESS SCHEDULES MUST BE REVIEWED AND APPROVED BY THE PROJECT PM AND STATE SCHEDULING ENGINEER. [Contact State Scheduling Engineer, Frank Gbinije (804) 786-2980, for clarification if project usage is unclear.] EXCEPTIONS: DO NOT USE ON EMERGENCY CONTRACT (See S100EE0 Emergency Contract Projects) OR ON-CALL PROJECTS (See c103gg0 No Progress Schedule Required).

S108M00-0808

VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION FOR
SCHEDULE OF OPERATIONS FOR CATEGORY M PROJECTS

May 12, 2008

Section 103.06(e) Progress Schedule of the Specifications is deleted and replaced by this provision.

Section 108.03 Progress Schedule of the Specifications is deleted and replaced by this provision.

General Requirements – The Contractor shall plan and schedule the work and shall submit his overall work plan in the form of a written Schedule of Operations as described herein, for the Engineer's review and acceptance. The accepted Schedule of Operations will be used by the Engineer for planning and coordination of the Department activities, resources, and expenditures.

When preparing the Schedule of Operations, the Contractor shall consider all known constraints and restrictions such as holidays, seasonal, weather, traffic, utility, railroad, right-of-way, environmental, permits, or other known or specified limitations to the work.

At the Pre-Construction Conference the Contractor shall be prepared to discuss his planned or contemplated operations relative to the contract requirements and this special provision.

Delays resulting from the Contractor's failure to provide the Schedule of Operations will not be considered just cause for extension of the contract time limit or for additional compensation.

Schedule of Operations – The Contractor shall submit to the Engineer three (3) copies of the written Schedule of Operations at least seven (7) calendar days prior to beginning work. The Schedule of Operations shall represent the Contractor's overall work plan to accomplish the entire scope of work in accordance with the requirements of the Contract. The Schedule of Operations shall include all work including, as applicable, the work to be performed by sub-contractors, the Department, or others. The Schedule of Operations submittal shall consist of a written Narrative to:

- (a) Describe the Contractor's proposed general sequence to accomplish the work;
- (b) Indicate the general schedule of work to be completed each month in terms of the major operations, routes, or segments of work as delineated in the contract documents or in the absence of such delineations, as agreed to by the Contractor and the Engineer. A bar-chart schedule may be substituted at the Contractor's option.

Two Week Look-ahead (TWLA) Schedule of Operations – At least seven (7) calendar days prior to beginning work, the Contractor shall submit to the Engineer, an initial written TWLA Schedule of Operations for any work planned for the first two weeks. Every week thereafter, on a day agreed to by the Contractor and the Engineer, the Contractor shall submit to the Engineer, a written TWLA Schedule of Operations for the following two-week period. The TWLA schedule shall provide a detailed list of operations to indicate the type of operation, location(s) of the work, proposed working days and hours, and the start and finish dates for any work planned, started, in progress, or scheduled for completion.

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during the two-week period. The TWLA Schedule of Operations shall also indicate any critical stage(s) of work requiring VDOT oversight or inspection. The Contractor shall submit three (3) copies of the TWLA Schedule of Operations to the Engineer in any legible format.

The Contractor may revise his TWLA Schedule of Operations at his discretion. However, the Contractor shall notify the Engineer at least forty-eight (48) working hours in advance of any changes in the Contractor's planned operations or critical stage work requiring Department oversight or inspection. In the event of extenuating circumstances deemed by the Engineer to be beyond the Contractor's control, the Engineer may grant verbal concurrence of changes in the Contractor's planned operations with less advance notice, as the need arises.

Revised Schedule of Operations – The Contractor may revise his overall plan of operations at any time, however, the Contractor shall submit a Revised Schedule of Operations to reflect any changes in his overall sequence of operations or general schedule. The Contractor may be required, as determined by the Engineer to submit a Revised Schedule of Operations. Circumstances that may prompt the Engineer's decision to request a Revised Schedule of Operations may include deviations from the overall sequence of operations or if the actual progress of work varies by one month or more from the currently accepted Schedule of Operations.

When required by the Engineer, the Revised Schedule of Operations shall be submitted within seven (7) calendar days of receipt of the Engineer's written request. The Revised Schedule of Operations shall be submitted in the form of the Schedule of Operations as defined herein, to reflect the changes in the Contractor's overall work plan. The accepted Revised Schedule of Operations will replace any previously accepted Schedule of Operations for the remainder of the work.

Review and Acceptance – The Engineer will review the Initial or subsequent Revised Schedule of Operations submittals for acceptance within seven (7) calendar days of receipt of the Contractor's complete submittal. Review and acceptance by the Engineer will be based on conformance with the requirements of this provision and the Contract.

Review and acceptance by the Engineer will not constitute a waiver of any contract requirements and will in no way assign responsibilities of the work plan, scheduling assumptions, and validity of the work plan or schedule to the Department. Failure of the Contractor to include in the Schedule of Operations any element of work required by the Contract for timely completion of the Contract shall not excuse the Contractor from his contractual obligations.

Measurement and Payment – Category M Schedule of Operations including the Initial and any subsequent Revised Schedule of Operations requested by the Engineer or originated by the Contractor, will not be measured or paid for separately. All associated costs to prepare, update, revise, and/or furnish the Schedule of Operations for Category M projects in accordance with the requirements herein shall be considered incidental to the work.

GUIDELINES — FOR PROJECTS REQUIRING STEEL PRICE ADJUSTMENTS.**S109D01-0609****VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION FOR
PRICE ADJUSTMENT FOR STEEL**

February 6, 2009

The Department will adjust monthly progress payments up or down as appropriate for cost changes in steel used on specific items of work identified in the contract in accordance with this provision. Provided within this Special Provision is a master listing of standard bid items the Department has determined are eligible for steel price adjustment.

Included with the bidding proposal is an automatically generated project-specific listing of standard bid items the Department has identified as eligible for steel price adjustment. Only items on this listing will be eligible for steel price adjustment. Generally, *non-standard* pay items will not be eligible for steel price adjustment unless such steel items are project-specific modifications of items normally eligible, are clearly and specifically identified by a separate and distinct steel pay item and the quantities present on the project constitute major items of the work, in which case such items may be addressed by project specific provisions and their related pay items designated in the bid proposal as being eligible. The listing of items eligible for steel price adjustment for a particular project will be shown on Form C-21C "Bid Items Eligible for Steel Price Adjustment" and included with the bidding documents. The Bidder may choose to have steel price adjustment applied to any, all or none of the eligible items shown on Form C-21C. The Bidder's selection of items for steel price adjustment or non selection (non participation) may not be changed once he has submitted Form C-21C to the Department

In order to confirm eligibility for steel price adjustment under this provision, within 15 calendar days after the date of the Contract Award letter, the Contractor shall submit to the State Contract Engineer on Form C-21C those pay items he chooses to have steel price adjustment applied on. Items the Contractor chooses for steel price adjustment must be designated by writing the word "Yes" in the column titled "Option" by each bid item chosen for adjustment. The Contractor's designations on Form C-21C must be written in ink or typed, and signed by the Contractor to be considered complete. Items not properly designated, or designated with "No" or left blank on the Contractor's C-21C "Bid Items Eligible for Steel Price Adjustment" form will automatically not be considered for adjustment. If the Contractor fails to return his Form C-21C within the timeframe specified, no steel items will be eligible for steel price adjustment on the designated project.

Please note: Inventoried materials from the listing of eligible items are specifically excluded for consideration. Additionally, items from the listing of eligible items for which the Contractor has requested payment as Material on Hand in accordance with the provisions of Section 109.09 are specifically excluded for consideration past the delivery date to the fabricator. This provision also does not allow for price adjustment for embedded steel where the steel item is a component of the finished bid item and there is no separate or distinct payment for the steel item or for steel used for pre-tensioned or post-tensioned precast components where furnishing steel is included in the unit price of the finished bid item.

The requirements of this provision shall apply only to material cost changes that occur between the date of the receipt of bids by the Department and the date the material is shipped to the fabricator. In addition to the requirements listed above, to be eligible for this price adjustment, the Contractor, subcontractor and/or supplier is required to place his purchase order for the steel items in his contract he has designated for price adjustment within 30 calendar days after the date of execution of this contract with the Department so as to better ensure reduced cost for steel used in such items. The timeliness of his response is also to insure the receipt of such items in a timely manner that shall not adversely affect his progress schedule or contract completion date. Further, in order for steel items to be eligible for

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adjustment, once shipped to the fabricator, the items shall be specifically stored, labeled, or tagged, recognizable by color marking, and identifiable by project for inspection and audit verification.

Within 14 days after the date of contract execution, the Contractor shall submit to the appropriate District Construction Engineer material price quotes, bid papers, or other similar type of documentation satisfactory to the Department for the bid items listed in the Contract for which it is requesting a steel price adjustment. This documentation shall support the completion of the form establishing the average price per pound for the eligible steel bid item. The Contractor must use the format as shown with this provision; no other format for presenting this information will be permitted. The Contractor shall certify that all items of documentation are original and were used in the computation of the amount bid for the represented eligible pay items for the month bids were opened. This documentation shall support the base line material price ("Base Price") of the steel item only. No adjustment will be made for changes in other components of the contract unit bid price, including, but not limited to, fabrication, shipping, storage, handling, and erection.

Failure to submit specifically required information such as purchase order, price data, bill of lading, material information or other requested information as noted herein will result in the Contractor not being eligible for price adjustment of steel items.

Price adjustment of each qualifying item under consideration will be subject to the following condition:

There is an increase or decrease in the cost of eligible steel materials in excess of 10 percent up to a maximum of 60 percent from the Base Price when compared with the latest published price index ("Price Index") in effect at the time material is shipped to the fabricator.

The Price Index the Department is using is based on The U.S. Department of Labor, Bureau of Labor Statistics, Producers Price Index (PPI) which measures the average price change over time of the specific steel eligible item from the perspective of the seller of goods. The specific Producers Price Index (PPI) to be used to adjust the price for the eligible VDOT steel items is shown in the table below. **Please note:** The Producers Price Index (PPI) is subject to revision 4 months after original publication, therefore, price adjustments and payments will not be made until the index numbers are finalized.

The table attached to the end of this provision indicates the Producers Price Index (PPI) steel category index items and the corresponding I.D. numbers to which VDOT items will be compared.

The price adjustment will be determined by computing the percentage of change in index value beyond 10 percent above or below the index on the bid date to the index value on the date the steel material is shipped to the fabricator (Please see included sample examples). Weights and date of shipment must be documented by a bill of lading provided to the Department. The final price adjustment dollar value will be determined by multiplying this percent increase or decrease in the index (after 10%) by the represented quantity of steel shipped, by the Base Price per pound subject to the limitations herein.

Price increase/decrease will be computed as follows:

$$A = B \times P \times Q$$

Where;

- A = Steel price adjustment in lump sum dollars
- B = Average weighted price of steel submitted with bid on project in \$ per pound
- P = Adjusted percentage change in PPI average from shipping date to bid date minus 10% (0.10) threshold
- Q = Total quantity of steel in pounds shipped to fabricator for specific project

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Delays to the work caused by steel shortages may be justification for a contract time extension but will not constitute grounds for claims for standby equipment, extended office overhead, or other costs associated with such delays.

The need for application of the adjustments herein to extra work will be determined by the Engineer on an individual basis and, if appropriate, will be specified on the Work Order.

This price adjustment is capped at 60 percent. This means the maximum "P" value for increase or decrease that can be used in the above equation is 50% (60%-10% threshold).

Calculations for price adjustment shall be shown separate from the monthly progress estimate and will not be included in the total cost of work for determination of progress or for extension of contract time.

Any apparent attempt to unbalance bids in favor of items subject to price adjustment may result in rejection of the bid proposal.

20-Jan-05

Sample Form to be turned in for Steel Price Adjustment Provision

(All prices to be supported by project-specific quotes)

BID DATE

28-Apr-04

Bid Item 61720 High Strength Structural Steel

Supplier	Description of material	Unit price f.o.b supplier \$/lbs	Quantity In lbs.	Price Extension	Date of Quote
XYZ mill	Structural beams Various sizes (see quote)	\$0.28	1,200,000	\$336,000.00	21-Apr-04
ABC distributing	Various channel & angle shapes (see quote)	\$0.32	35,000	\$11,200.00	20-Apr-04

Total	1,235,000	\$347,200.00
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Average weighted price =	\$0.2816
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Note: All prices are to include any surcharges on materials quoted as if they are shipped in the month the bid is submitted. Vendors must include this surcharge along with their base price on their quotes.

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20-Jan-05

Sample Calculation of a Price Adjustment (increase)

Project bid on April 28, 2004.

Project has 450,000 lb. of structural steel.

Orders placed in timely manner and according to contract.

Contractor's *f.o.b. supplier price for the structural steel in bid is \$0.2816 per pound. *free on board

Adjusted** BLS Producers Price Index (PPI) most recently published average at time of bid is 139.6.

 ** final change
 after 4 months

All steel shipped to fabricator in same month, October 2004.

Adjusted BLS Producers Price Index (PPI) most recently published average for month of October is 161.1

Adjustment formula is as follows:

$$A = B \times P \times Q$$

Where; A = Steel price adjustment in lump sum dollars
 B = Average weighted price of steel submitted with bid on project in \$
 per pound
 P = Adjusted percentage change in PPI average from shipping date to
 bid date minus 10% (0.10) threshold
 Q = Total quantity of steel shipped to fabricator in October 2004 for this
 project in pounds

$$B = \$0.2816$$

$$P = (161.1 - 139.6) / 139.6 - 0.10 = 0.054$$

$$Q = 450,000 \text{ lb.}$$

$$A = 0.2816 \times 0.054 \times 450,000$$

$$A = \$6,842.88 \text{ pay adjustment to Contractor}$$

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20-Jan-05

Sample Calculation of a Price Adjustment (decrease)

Project bid on April 28, 2004.

Project has 450,000 lb. of structural steel.

Orders placed in timely manner and according to contract.

Contractor's *f.o.b. supplier price for structural steel in bid is \$0.2816 per pound. *free on board

Adjusted BLS Producers Price Index (PPI) most recently published average at time of bid is 156.6.

All steel shipped to fabricator in same month, October 2004.

Adjusted BLS Producers Price Index (PPI) most recently published average for month of October is 136.3

Adjustment formula is as follows:

$$A = B \times P \times Q$$

Where;

- A = Steel price adjustment in lump sum dollars
- B = Average weighted price of steel submitted with bid on project in \$ per pound
- P = Adjusted percentage change in PPI average from shipping date to bid date minus 10% (0.10) threshold
- Q = Total quantity of steel shipped to fabricator in October 2004 for this project in pounds

$$B = \$0.2816$$

$$P = (156.6 - 136.3) / 156.6 - 0.10 = 0.030$$

$$Q = 450,000 \text{ lb.}$$

$$A = 0.2816 \times 0.030 \times 450,000$$

$$A = \$3,801.60 \text{ credit to Department}$$

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MASTER LISTING**STANDARD BID ITEMS ELIGIBLE FOR STEEL PRICE ADJUSTMENT**

Sept. 24, 2008 rev # 1 added 4 corrosion resistant re-bar items.
 Dec. 4, 2008 rev # 2 deleted item 68138 straighten structural steel
 January 14, 2009 rev # 3 identified BLS WPU used in \$ adjustment
 March 18, 2009 added items 61813,68109 & 68110

BLS Series I. D.

ITEM NUMBER	ITEM DESCRIPTION	UNITS	Number WPU used in \$ adjust.
00519	SHEET PILE, STEEL	SF	avg. 1017 & 101
00540	REINF. STEEL	LB	101704
00542	EPOXY COATED REINF. STEEL	LB	101704
00560	STRUCTURAL STEEL JB-1	LB	avg. 1017 & 101
11030	REINF. STEEL BRIDGE APPR. SLAB	LB	101704
11181	PATCH.HYDR.CEM.CONC. PAVE.	SY	101704
13290	GUARDRAIL GR-8 (NCHRP 350 TL-3)	LF	avg. 1017 & 101
13292	GUARDRAIL GR-8A (NCHRP 350 TL-3)	LF	avg. 1017 & 101
13294	GUARDRAIL GR-8B (NCHRP 350 TL-3)	LF	avg. 1017 & 101
13310	GUARDRAIL TERMINAL GR-6 (NCHRP 350)	LF	avg. 1017 & 101
13320	GUARDRAIL GR-2	LF	avg. 1017 & 101
13323	GUARDRAIL GR-2A	LF	avg. 1017 & 101
13331	RAD. GUARDRAIL GR-2	LF	avg. 1017 & 101
13333	RAD. GUARDRAIL GR-2A	LF	avg. 1017 & 101
13335	GUARDRAIL GR-3	LF	avg. 1017 & 101
13341	GUARDRAIL TER. GR-6(WEATHERING STEEL)	LF	avg. 1017 & 101
13351	GUARDRAIL GR-8	LF	avg. 1017 & 101
13352	GUARDRAIL GR-8A	LF	avg. 1017 & 101
13353	GUARDRAIL GR-8B	LF	avg. 1017 & 101
13355	GUARDRAIL GR-10	LF	avg. 1017 & 101
13421	MEDIAN BARRIER MB-3	LF	avg. 1017 & 101
13450	MEDIAN BARRIER MB-5	LF	avg. 1017 & 101
13451	MEDIAN BARRIER MB-5A	LF	avg. 1017 & 101
13452	MEDIAN BARRIER MB-5B	LF	avg. 1017 & 101
13545	REINF. STEEL	LB	101704
14502	REINFORCING STEEL	LB	101704
15290	PATCH.CEM.CONC.PAVE.TY.CRCP-A	SY	101704
15302	PATCH.CEM.CONC.PAVE. TY. II	SY	101704
15305	PATCH.CEM.CONC.PAVE.TY. IV-A	SY	101704
17323	GUARDRAIL BEAM *	LF	avg. 1017 & 101
17325	RADIAL GUARDRAIL BEAM *	LF	avg. 1017 & 101
17327	RUB RAIL	LF	avg. 1017 & 101
17353	CABLE GR-3	LF	avg. 1017 & 101
17521	GUARDRAIL BEAM (WEATHERING STEEL)	LF	avg. 1017 & 101
17523	RADIAL GUARDRAIL BEAM (WEATHERING STEEL)	LF	avg. 1017 & 101
17525	RUB RAIL (WEATHERING STEEL)	LF	avg. 1017 & 101
22501	FENCE FE-W1	LF	avg. 1017 & 101
22643	FENCE FE-CL	LF	avg. 1017 & 101
22645	FENCE FE-CL VINYL COATED	LF	avg. 1017 & 101
23043	WATER GATE FE-4 TY.III	LF	avg. 1017 & 101
23501	FENCE FE-W1 (FABRIC ONLY)	LF	avg. 1017 & 101
45522	4" STEEL ENCASE. PIPE	LF	101706
45532	6" STEEL ENCASE. PIPE	LF	101706
45562	16" STEEL ENCASE. PIPE	LF	101706
45572	18" STEEL ENCASE. PIPE	LF	101706

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45582	24" STEEL ENCASE. PIPE	LF	101706
45584	24" JACKED STEEL ENCASUREMENT PIPE	LF	101706
45592	30" STEEL ENCASE. PIPE	LF	101706
50402	SIGN POST STEEL 3"	LF	101706
50404	SIGN POST STEEL 4"	LF	101706
50406	SIGN POST STEEL 6"	LF	101706
50410	SIGN POST STEEL 10"	LF	101706
50412	SIGN POST STEEL 12"	LF	101706
50414	SIGN POST STEEL 14"	LF	101706
50416	SIGN POST STEEL 16"	LF	101706
50418	SIGN POST STEEL 18"	LF	101706
51317	SIG. POLE MP-1 20' ONE ARM 30'	EA	101706
51319	SIG. POLE MP-1 20' ONE ARM 32'	EA	101706
51325	SIG. POLE MP-1 20' ONE ARM 38'	EA	101706
51327	SIG. POLE MP-1 20' ONE ARM 40'	EA	101706
51329	SIG. POLE MP-1 20' ONE ARM 42'	EA	101706
51331	SIG. POLE MP-1 20' ONE ARM 44'	EA	101706
51337	SIG. POLE MP-1 20' ONE ARM 50'	EA	101706
51339	SIG. POLE MP-1 20' ONE ARM 52'	EA	101706
51341	SIG. POLE MP-1 20' ONE ARM 54'	EA	101706
51344	SIG. POLE MP-1 20' ONE ARM 56'	EA	101706
51346	SIG. POLE MP-1 20' ONE ARM 58'	EA	101706
51347	SIG. POLE MP-1 20' ONE ARM 60'	EA	101706
51348	SIG. POLE MP-1 20' ONE ARM 62'	EA	101706
51368	SIG. POLE MP-1 20' TWO ARMS 36' & 42'	EA	101706
51400	SIG. POLE MP-1 CO. LU. ONE ARM 38	EA	101706
51402	SIG. POLE MP-1 CO. LU. ONE ARM 40	EA	101706
51408	SIG. POLE MP-1 CO. LU. ONE ARM 46	EA	101706
51412	SIG. POLE MP-1 CO. LU. ONE ARM 50	EA	101706
51414	SIG. POLE MP-1 CO. LU. ONE ARM 52	EA	101706
51416	SIG. POLE MP-1 CO. LU. ONE ARM 54	EA	101706
51418	SIG. POLE MP-1 CO. LU. ONE ARM 56	EA	101706
51420	SIG. POLE MP-1 CO. LU. ONE ARM 58	EA	101706
51422	SIG. POLE MP-1 CO. LU. ONE ARM 60	EA	101706
55162	LIGHTING POLE LP-1 30'-4'	EA	101706
55163	LIGHTING POLE LP-1 30'-6'	EA	101706
55166	LIGHTING POLE LP-1 30'-12'	EA	101706
55169	LIGHTING POLE LP-1 35'-6'	EA	101706
55171	LIGHTING POLE LP-1 35'-10'	EA	101706
55176	LIGHTING POLE LP-1 40'-8'	EA	101706
55185	LIGHTING POLE LP-2 TYPE A	EA	101706
55186	LIGHTING POLE LP-2 TYPE B	EA	101706
55187	LIGHTING POLE LP-2 TYPE C	EA	101706
55188	LIGHTING POLE LP-2 TYPE D	EA	101706
55189	LIGHTING POLE LP-2 TYPE E	EA	101706
55190	LIGHTING POLE LP-2 TYPE F	EA	101706
55192	LIGHTING POLE LP-2 TYPE H	EA	101706
60452	REINF. STEEL BRIDGE APPR. SLAB	LB	101704
61700	REINF. STEEL	LB	101704
61704	CORROSION RESISTANT REINF. STEEL	LB	101704
61705	EPOXY COATED REINF. STEEL	LB	101704
61750	STRUCT. STEEL HIGH STRG. PLT. GIRDERS	LB	avg. 1017 & 101
61811	STR. STEEL PLATE GIRDER ASTM A709 GRADE50	LB	avg. 1017 & 101
61812	STR. STEEL PLATE GIRDER ASTM A709 GRADE50	LB	avg. 1017 & 101
61813	STR. STEEL PLATE GIRDER ASTM A709 GRADEHPS50W	LB	avg. 1017 & 101
61814	STR. STEEL PLATE GIRDER ASTM A709 GRADEHPS70W	LB	avg. 1017 & 101
61820	STR. STEEL ROLLED BEAM ASTM A709 GRADE 36	LB	avg. 1017 & 101

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61821	STR.STEEL ROLLED BEAM ASTM A709 GRADE50	LB	avg. 1017 & 101
61822	STR.STEEL ROLLED BEAM ASTM A709 GRADE50W	LB	avg. 1017 & 101
61990	STEEL GRID FLOOR	SF	avg. 1017 & 101
64110	STEEL PILES 10"	LF	avg. 1017 & 101
64112	STEEL PILES 12"	LF	avg. 1017 & 101
64114	STEEL PILES 14"	LF	avg. 1017 & 101
64768	DRIVING TEST FOR 12" STEEL PILE	LF	avg. 1017 & 101
64778	DRIVING TEST FOR 14" STEEL PILE	LF	avg. 1017 & 101
65200	REINF. STEEL	LB	101704
65204	CORROSION RESISTANT REINF. STEEL	LB	101704
65205	EPOXY COATED REINF. STEEL	LB	101704
67086	PED. FENCE 6'	LF	avg. 1017 & 101
67088	PED. FENCE 8'	LF	avg. 1017 & 101
67089	PED. FENCE 10'	LF	avg. 1017 & 101
68100	REINF. STEEL	LB	101704
68104	CORROSION RESISTANT REINF. STEEL	LB	101704
68105	EPOXY COATED REINF. STEEL	LB	101704
68107	STR.STEEL PLATE GIRDER ASTM A709 GRADE50	LB	avg. 1017 & 101
68108	STR. STEEL PLATE GIRDER ASTM A709 GR50W	LB	avg. 1017 & 101
68109	STR. STEEL PLATE GIRDER ASTM A709 GR.HPS50W	LB	avg. 1017 & 101
68110	STR. STEEL PLATE GIRDER ASTM A709 GR.HPS70W	LB	avg. 1017 & 101
68112	STR.STEEL ROLLED BEAM ASTM A709 GR.36	LB	avg. 1017 & 101
68113	STR.STEEL ROLLED BEAM ASTM A709 GR.50	LB	avg. 1017 & 101
68114	STR.STEEL ROLLED BEAM ASTM A709 GR. 50W	LB	avg. 1017 & 101
68115	STRUCT. STEEL	LB	avg. 1017 & 101
68270	REINF. STEEL BRIDGE APPR. SLAB	LB	101704
69060	SHEET PILES, STEEL	SF	avg. 1017 & 101
69100	REINF. STEEL	LB	101704
69104	CORROSION RESISTANT REINF. STEEL	LB	101704
69105	EPOXY COATED REINF. STEEL	LB	101704
69110	STEEL PILES 10"	LF	avg. 1017 & 101
69112	STEEL PILE 12"	LF	avg. 1017 & 101
69113	DRIVING TEST FOR 12" STEEL PILE	LF	avg. 1017 & 101

*These SPECIFICATIONS REVISIONS are subject to change on short notice.

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GUIDELINES — FOR PROJECTS REQUIRING FUEL ADJUSTMENT AS AN OPTION.**S109F00-0708****VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION FOR
OPTIONAL ADJUSTMENT FOR FUEL**December 20, 2005c
Reissued July 2008c

The Department will adjust monthly progress payments up or down as appropriate for cost changes in fuel used on specific items of work identified in this provision. The Department will provide a master listing of standard bid items eligible for fuel adjustment on its website.

Included with this proposal is a listing of standard bid items the Department has identified as eligible for fuel adjustment on this project(s) as well as the respective fuel factors per pay unit for those items. Only items on this listing will be eligible for adjustment. The fuel usage factor for each item is considered inclusive of all fuel usage. Generally, non-standard pay items are not eligible for fuel adjustment.

The listing of eligible items applicable to this particular project is shown on Form C-21B "Bid Items Eligible for Fuel Adjustment" included with the bidding documents. The Bidder may choose to have fuel adjustment applied to any or all eligible items on this project's listing by designating the items for which the fuel adjustment will apply. The Bidder's selection of items for fuel adjustment may not be changed once he has submitted Form C-21B to the Department.

In order to be eligible for fuel adjustment under this provision, the apparent lowest responsive and responsible Bidder shall clearly identify on Form C-21B those pay items he chooses to have fuel adjustment applied on. Within 21 days after the receipt of bids the apparent successful Bidder shall submit his designated items on Form C-21B to the Contract Engineer. Items the successful Bidder chooses for fuel adjustment must be designated by writing the word "Yes" in the column titled "Option" by each bid item chosen for fuel adjustment. The successful Bidder's designations on Form C-21B must be written in ink or typed, and signed by this Bidder to be considered complete. Items not properly designated or left blank on the Bidder's C-21B "Bid Items Eligible for Fuel Adjustment" form will automatically not be considered for adjustment. If the apparent successful Bidder fails to return his Form C-21B within the timeframe specified, items will not be eligible for fuel adjustment on this project.

The monthly index price to be used in the administration of this provision will be calculated by the Department from the Diesel fuel prices published by the U. S. Department of Energy, Energy Information Administration on highway diesel prices, for the Lower Atlantic region. The monthly index price will be the price for diesel fuel calculated by averaging each of the weekly posted prices for that particular month.

For the purposes of this provision, the base index price will be calculated using the data from the month preceding the receipt of bids. The base index price will be posted by the Department at the beginning of the month for all bids received during that month.

The current index price will be posted by the Department and will be calculated using the data from the month preceding the particular estimate being vouchered for payment.

The current monthly quantity for eligible items of work selected by the Contractor for fuel adjustment will be multiplied by the appropriate fuel factor to determine the gallons of fuel to be cost adjusted. The amount of adjustment per gallon will be the net difference between the current index price and the base index price. Computation for adjustment will be made as follows:

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$$S = (E - B) QF$$

Where; S = Monetary amount of the adjustment (plus or minus)

B = Base index price

E = Current index price

Q = Quantity of individual units of work

F = Appropriate fuel factor

Adjustments will not be made for work performed beyond the original contract time limit unless the original time limit has been changed by an executed Work Order.

If new pay items are added to this contract by Work Order and they are listed on Department's master listing of eligible items, the Work Order must indicate which of these individual items will be fuel adjusted; otherwise, those items will not be fuel adjusted. If applicable, designating which new pay items will be added for fuel adjustment must be determined during development of the Work Order and clearly shown on Form C-10 Work Order. The Base Index price on any new eligible pay items added by Work Order will be the Base Index price posted for the month in which bids were received for that particular project. The Current Index price for any new eligible pay items added by Work Order will be the Index price posted for the month preceding the estimate on which the Work Order is paid.

When quantities differ between the last monthly estimate prepared upon final acceptance and the final estimate, adjustment will be made using the appropriate current index for the period in which that specific item of work was last performed.

In the event any of the base fuel prices in this contract increase more than 100 percent (i.e. fuel prices double), the Engineer will review each affected item of work and give the Contractor written notice if work is to stop on any affected item of work. The Department reserves the right to reduce, eliminate or renegotiate the unit price for remaining portions of affected items of work.

Any amounts resulting from fuel adjustment will not be included in the total cost of work for determination of progress or for extension of contract time.

GUIDELINES - FOR ALL PROJECTS CONTAINING ELIGIBLE ASPHALT MATERIALS ON THE ATTACHED MASTER LIST. FOR E MIXES OR MODIFIED D&E MIXES, INCLUDE SPCN c109g02 PG 76-22 - 70-28 Asphalt Cement Adjust.

S109G03-1109

VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION FOR
ASPHALT MATERIAL PRICE ADJUSTMENT

July 30, 2008cc

All asphalt material contained in the attached master listing of eligible bid items and designated by pay items in the contract will be price adjusted in accordance with the provisions as set forth herein. Other items will not be adjusted, except as otherwise specified in the contract. If new pay items which contain asphalt material are established by Work Order, they will not be subject to Price Adjustment unless specifically designated in the Work Order to be subject to Price Adjustment.

Each month, the Department will publish an average state-wide PG 64-22 f.o.b. price per ton developed from the average terminal prices provided to the Department from suppliers of asphalt cement to contractors doing work in Virginia. The Department will collect terminal prices from approximately 12 terminals each month. These prices will be received once each month from suppliers on or about the last weekday of the month. The high and low prices will be eliminated and the remaining values averaged to establish the average statewide price for the following month. That monthly state-wide average price will be posted on the Scheduling and Contract Division website on or about the first weekday of the following month.

This monthly statewide average price will be the Base Index for all contracts on which bids are received during the calendar month of its posting and will be the Current Index for all asphalt placed during the calendar month of its posting. In the event an index changes radically from the apparent trend, as determined by the Engineer, the Department may establish an index which it determines to best reflect the trend.

The amount of adjustment applied will be based on the difference between the contract Base Index and the Current Index for the applicable calendar month during which the work is performed. Adjustment of any asphalt material item designated as a price adjustment item which does not contain PG 64-22, except PG 76-22, will be based on the indexes for PG 64-22. The quantity of asphalt cement for asphalt concrete pavement to which adjustment will be applied will be the quantity based on the percent of asphalt cement shown on the appropriate approved job mix formula.

The quantity of asphalt emulsion for surface treatments to which adjustment will be applied will be the quantity based on 65 percent residual asphalt.

Price adjustment will be shown as a separate entry on the monthly progress estimate; however, such adjustment will not be included in the total cost of the work for progress determination or for extension of contract time.

Any apparent attempt to unbalance bids in favor of items subject to price adjustment or failure to submit required cost and price data as noted hereinbefore may result in rejection of the bid proposal.

*These SPECIFICATIONS REVISIONS are subject to change on short notice.

VIRGINIA DEPARTMENT OF TRANSPORTATION
MASTER LISTING OF
ASPHALT MATERIAL ITEMS ELIGIBLE FOR PRICE ADJUSTMENT
(10-27-09)

ITEM	DESCRIPTION	UNITS	SPECIFICATION
10062	Asphalt-Stab. Open-Graded Material	Ton	313
10416	Liquid Asphalt	Gal	311 312
10420	Blotted Seal Coat Ty. B	Sy	ATTD
10422	Blotted Seal Coat Ty. C	Sy	ATTD
10423	Blotted Seal Coat Ty. C-1	Sy	ATTD
10424	Blotted Seal Coat Ty. D	Sy	ATTD
10598	Ns Asphalt Concrete	Ton	315
10606	Asphalt Concrete Ty. SM-9.5	Ton	315
10607	Asphalt Concrete Ty. SM-12.5A	Ton	315
10608	Asphalt Concrete Ty. SM-12.5D	Ton	315
10609	Asphalt Concrete Ty. SM-12.5E (76-22)	Ton	315
10610	Asphalt Concrete Ty. IM-19.0A	Ton	315
10611	Asphalt Concrete Ty. IM-19.0D	Ton	315
10612	Asphalt Conc. Base Cr. Ty. BM-25.0	Ton	315
10613	Asphalt Concrete Ty. BM-37.5	Ton	315
10635	Asphalt Concrete Ty. SM-9.5A	Ton	315
10636	Asphalt Concrete Ty. SM-9.5D	Ton	315
10637	Asphalt Concrete Ty. SM-9.5E (76-22)	Ton	315
10639	Asphalt Concrete Ty. SM-19.0	Ton	315
10642	Asphalt Concrete Ty. BM-25.0A	Ton	315
10643	Asphalt Concrete Ty. BM-25.0D	Ton	315
10650	Stone Matrix Asphalt SMA-9.5(70-22)	Ton	317
10651	Stone Matrix Asphalt SMA-9.5(76-22)	Ton	317
10652	Stone Matrix Asphalt SMA-12.5(70-22)	Ton	317
10653	Stone Matrix Asphalt SMA-12.5(76-22)	Ton	317
10654	Stone Matrix Asphalt SMA-19.0(70-22)	Ton	317
10655	Stone Matrix Asphalt SMA-19.0(76-22)	Ton	317
10701	Liquid Asphalt Coating	Sy	ATTD
12505	Asphalt Concrete Curb Backup Material	Ton	315
13240	Asphalt Concrete Sidewalk	Ton	504
16110	Emul. Asph. Slurry Seal Type A	Sy	ATTD
16120	Emul. Asph. Slurry Seal Type B	Sy	ATTD
16130	Emul. Asph. Slurry Seal Type C	Sy	ATTD
16144	Latex Mod. Emul. Treat. Type B	Ton	ATTD
16145	Latex Mod. Emul. Treat. Type C	Ton	ATTD
16146	Latex Mod. Emul. Treat. Rutfilling	Ton	ATTD
16161	Modified Single Seal	Sy	ATTD
16162	Modified Double Seal	Sy	ATTD
16249	Nontracking Tack Coat	Gal.	ATTD
16250	Liquid Asphalt Matl. CMS-2 (Mod)	Gal	ATTD
16251	Liquid Asphalt Matl. CMS-2	Gal	ATTD
16252	Liquid Asphalt Matl. CRS-2	Gal	ATTD

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16253	Liquid Asphalt Matl. CRS-2H	Gal.	ATTD.
16254	Liquid Asphalt Matl. RC-250	Gal	ATTD
16256	Liquid Asphalt Matl. RC-800	Gal	ATTD
16257	Ns Liquid Asphalt Matl.	Gal	ATTD
16260	Liquid Asphalt Matl. CRS-2L	Gal	ATTD
16325	NS Asphalt Concrete	Ton	N/A
16330	Asphalt Concrete Ty. SM-9.0A	Ton	315
16335	Asphalt Concrete Ty. SM-9.5A	Ton	315
16337	Asph. Conc. Ty. SM-9.5ASL (Spot Level)	Ton	315
16340	Asphalt Concrete Ty. SM-9.5D	Ton	315
16342	Asph. Conc. Ty. SM-9.5DSL (Spot Level)	Ton	315
16345	Asphalt Concrete Ty. SM-9.5E (76-22)	Ton	315
16350	Asphalt Concrete Ty. SM-12.5A	Ton	315
16352	Asph. Con. Ty. SM-12.5ASL (Spot Level)	Ton	315
16355	Asphalt Concrete Ty. SM-12.5D	Ton	315
16357	Asph. Con. Ty. SM-12.5DSL (Spot Level)	Ton	315
16360	Asphalt Concrete Ty. SM-12.5E (76-22)	Ton	315
16365	Asphalt Concrete Ty. IM-19.0A	Ton	315
16370	Asphalt Concrete Ty. IM-19.0D	Ton	315
16373	Asphalt Concrete Ty. IM-19.0A (T)	Ton	315
16374	Asphalt Concrete Ty. IM-19.0D (T)	Ton	315
16377	Asphalt Concrete Ty. BM-37.5	Ton	315
16379	Asphalt Concrete Ty. IM-19.0T	Ton	315
16390	Asphalt Concrete Ty. BM-25.0A	Ton	315
16392	Asphalt Concrete Ty. BM-25.0D	Ton	315
16395	Asphalt Concrete Ty. BM-25.0A (T)	Ton	315
16397	Asphalt Concrete Ty. BM-25.0D (T)	Ton	315
16400	Stone Matrix Asphalt SMA-9.5(70-22)	Ton	ATTD
16401	Stone Matrix Asphalt SMA-9.5(76-22)	Ton	ATTD
16402	Stone Matrix Asphalt SMA-12.5(70-22)	Ton	ATTD
16403	Stone Matrix Asphalt SMA-12.5(76-22)	Ton	ATTD
16404	Stone Matrix Asphalt SMA-19.0(70-22)	Ton	ATTD
16405	Stone Matrix Asphalt SMA-19.0(76-22)	Ton	ATTD
16490	Hot Mix Asphalt Treatment	Ton	ATTD
16500	Surf.Preparation & Restoration Type I	Ton	ATTD
16502	Surf.Preparation & Restoration Type II	Ton	ATTD
16504	Surf.Preparation & Restoration Type Iii	Ton	ATTD
67201	NS Asphalt Concrete Overlay	Ton	315
67210	NS Asphalt Concrete	Ton	315
68240	NS Asphalt Concrete	Ton	315

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2007

——**SELECT USE 100 SERIES SPs (SPECIAL PROVISIONS)**——

The following are Select Use Special Provisions. None have been through the Department's complete Specifications Committee review/comment/acceptance process and are not part of the Standard Specifications. They are to be considered as project-specific and may be subject to modifications required to meet specific project conditions or requirements for Federal funding. Anyone making modifications is responsible for obtaining the appropriate expertise in the discipline applicable to the modification. If modifications are made the date must also be changed to reflect the current date. Please send a copy of the modified special provision with the new date and specific project number to David.Gayle@VDOT.Virginia.gov so it may be added to the Specifications Stockpile.

NONE

——**STANDARD 100 SERIES SSs (SUPPLEMENTAL SPECIFICATIONS)**——

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2007

GUIDELINES — ALL PROJECTS

SS1D008-0310

February 19, 2010

VIRGINIA DEPARTMENT OF TRANSPORTATION
2007 ROAD AND BRIDGE SUPPLEMENTAL SPECIFICATIONS**SUPPLEMENTAL DIVISION I—GENERAL PROVISIONS****SECTION 101—DEFINITIONS OF ABBREVIATIONS, ACRONYMS, AND TERMS**

Section 101.02—Terms of the Specifications is amended to replace the definition for **Notice to Proceed** with the following:

Notice to Proceed. A date selected by the Contractor that is no earlier than 15 nor later than 30 calendar days after the date of contract execution on which the Contractor intends to begin the work, or a contract specific date on which the Contractor may begin the work identified as the Notice to Proceed date in the Contract Documents.

SECTION 102—BIDDING REQUIREMENTS AND CONDITIONS

Section 102.04(c) Notice of Alleged Ambiguities of the Specifications is amended to replace the first paragraph with the following:

If a word, phrase, clause, or any other portion of the proposal is alleged to be ambiguous, the Bidder shall submit to the State Contract Engineer a written notice of the alleged ambiguity not later than 10 days prior to the date of receipt of bids and request an interpretation thereof. This written notice shall be submitted via the CABB (Contractor Advertisement Bulletin Board) system located on the Construction website at www.VDOT.Virginia.gov. Authorized interpretations will be issued by the State Contract Engineer to each person who received a proposal and will be posted on the CABB system.

SECTION 105—CONTROL OF WORK

Section 105.01—Notice to Proceed of the Specifications is replaced with the following:

Unless otherwise indicated in the Contract, the Notice to Proceed date will be the date selected by the Contractor on which the Contractor intends to begin the work. That date shall be no earlier than 15 nor later than 30 calendar days after the date of contract execution. The State Contract Engineer will contact the Contractor on the date of contract execution to inform him that the contract has been executed. The State Contract Engineer will also confirm this date in the Letter of Contract Execution. Copies of the Letter of Contract Execution will be distributed to Department personnel involved in the administration of the Contract and to the Contractor. Within 10 calendar days after the date of contract execution the Contractor shall submit to the Engineer written notice of the date he has selected as his Notice to Proceed date. If the Contractor fails to provide written notice of his selected Notice to Proceed Date within 10 calendar days of contract execution, the selected Notice to Proceed Date will become the date 15 calendar days after the date of contract execution. The Contractor shall begin work no later than 10 calendar days after the date he has selected as his Notice to Proceed date, unless the Notice to Proceed date is otherwise indicated in the Contract, in which case the Contractor shall begin work within 10 calendar days after the specific Notice to Proceed date indicated in the Contract.

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Contract Time will commence on the date of the Notice to Proceed. The Letter of Contract Execution will identify the Chief Engineer's authorized representative, hereafter referred to as the Engineer, who is responsible for written directives and changes to the Contract. The Engineer will contact the Contractor after notice of award to arrange a pre-construction conference.

In the event the Contractor, for matters of his convenience, wishes to begin work earlier than 15 calendar days or later than 30 calendar days after the date of contract execution, he shall make such a request in writing to the Engineer within 10 calendar days of the date of contract execution or once a Notice to Proceed Date has been established, if he wishes to begin work more than 10 calendar days after his selected Notice to Proceed date or the Notice to Proceed Date indicated in the Contract, he shall make such a request to the Engineer in writing no later than 5 calendar days after the Notice to Proceed date. If this requested start date is acceptable to the Department, the Contractor will be notified in writing; however, the Contract fixed completion date will not be adjusted but will remain binding. The Contractor's request to adjust the start date for the work on the Contract will not be considered as a basis for claim that the time resulting from the Contractor's adjusted start date, if accepted by the Engineer, is insufficient to accomplish the work nor shall it relieve the Contractor of his responsibility to perform the work in accordance with the scope of work and requirements of the Contract. In no case shall work begin before the Department executes the Contract or prior to the Notice to Proceed date unless otherwise permitted by the Contract or authorized by the Engineer. The Contractor shall notify the Engineer at least 24 hours prior to the date on which he will begin the work.

Section 105.02—Pre-Construction Conference of the Specifications is amended to replace the first paragraph with the following:

After notification of award and prior to the Notice to Proceed date the Contractor shall attend a pre-construction conference scheduled by the Engineer to discuss the Contractor's planned operations for prosecuting and completing the work within the time limit of the Contract. At the pre-construction conference the Engineer and the Contractor will identify in writing the authorities and responsibilities of project personnel for each party. The pre-construction conference may be held simultaneously with the scheduling conference when the Engineer so indicates this in advance to the Contractor. When these are simultaneously held, the Contractor shall come prepared to discuss preparation and submittal details of the progress schedule in accordance with the requirements of the Contract.

Section 105.10(c)(1)—Steel Structures of the Specifications is replaced with the following:

Working drawings for steel structures, including metal handrails, shall consist of shop detail, erection, and other working drawings showing details, dimensions, sizes of units, and other information necessary for the fabrication and erection of metal work.

Section 105.14—Maintenance During Construction of the Specifications is amended to add the following:

The Contractor shall provide at least one person on the project site during all work operations who is currently verified either by the Department in Intermediate Work Zone Traffic Control, or by the American Traffic Safety Services Association (ATSSA) as a Traffic Control Supervisor (TCS). This person must have the verification card with them while on the project site. This person shall be responsible for the oversight of work zone traffic control within the project limits in compliance with the contract requirements involving the plans, specifications, the VWAPM, and the MUTCD. This person's duties shall include the supervision of the installation, adjustment (if necessary), inspection, maintenance and removal when no longer required of all traffic control devices on the project.

If none of the Contractor's on-site personnel responsible for the supervision of such work has the required verification with them or if they have an outdated verification card showing they are not currently verified either by the Department in Intermediate Work Zone Traffic Control, or by the

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American Traffic Safety Services Association (ATSSA) as a Traffic Control Supervisor (TCS) all work on the project will be suspended by the Engineer.

The Contractor shall provide at least one person on site who is, at a minimum, verified by the Department in Basic Work Zone Traffic Control for each construction and/or maintenance operation that involves installing, maintaining, or removing work zone traffic control devices. This person shall be responsible for the placement, maintenance and removal of work zone traffic control devices.

In the event none of the Contractor's on-site personnel of any construction/maintenance operation has, at a minimum, the required verification by the Department in Basic Work Zone Traffic Control, that construction/maintenance operation will be suspended by the Engineer until that operation is appropriately staffed in accordance with the requirements herein.

Section 105.15(b) Mailboxes and Newspaper Boxes of the Specifications is replaced with the following:

- (b) **Mailboxes and Newspaper Boxes:** When removal of existing mailboxes and newspaper boxes is made necessary by construction operations, the Contractor shall place them in temporary locations so that access to them will not be impaired. Prior to final acceptance, boxes shall be placed in their permanent locations as designated by the Engineer and left in as good condition as when found. Boxes or their supports that are damaged through negligence on the part of the Contractor shall be replaced at his expense. The cost of removing and resetting existing boxes shall be included in other pay items of the Contract. New mailboxes designated in the plans shall be paid for in accordance with the provisions of Section 521 of the Specifications.

SECTION 107—LEGAL RESPONSIBILITIES

Section 107.13—Labor and Wages of the Specifications is amended to add the following:

- (c) **Job Service Offices:** In advance of the Contract starting date, the Contractor may contact the Job Service Office of the Virginia Employment Commission at the nearest location to secure referral of available qualified workers in all occupational categories. The closest office may be obtained by accessing the VEC website at <http://www.vec.virginia.gov> and "clicking" on "VEC Workforce Centers".

Section 107.14(f) Training of the Specifications is amended to replace 5 and 6 with the following:

5. If the Contract provides a pay item for trainees, training shall be in accordance with the requirements of Section 518 of the Specifications.

Section 107.16(a) Erosion and Siltation of the Specifications is amended to replace the fourth paragraph with the following:

For projects that disturb 10,000 square feet or greater of land or 2,500 square feet or greater in Tidewater, Virginia, the Contractor shall have within the limits of the project during land disturbance activities, an employee certified by the Department in Erosion and Sediment control who shall inspect erosion and siltation control devices and measures for proper installation and operation and promptly report their findings to the Inspector. Inspections shall include all areas of the site disturbed by construction activity and all off site support facilities covered by the project's Stormwater Pollution Prevention Plan. Inspections shall be conducted at least once every 14 calendar days and within 48 hours following any runoff producing storm event (Note: If an inspection is conducted as a result of a storm event, another inspection is not required for 14 calendar days following provided there are no more runoff producing storm events during the that period). For those areas that have been temporarily stabilized or runoff is unlikely to occur due to winter conditions (e.g., the site is covered with snow or ice or frozen ground exists), inspections

shall be conducted at least once a month. Those definable areas where final stabilization has been achieved will not require further inspections provided such areas have been identified in the project's Stormwater Pollution Prevention Plan. Failure of the Contractor to maintain a certified employee within the limits of the project will result in the Engineer suspending work related to any land disturbing activity until such time as a certified employee is present on the project. Failure on the part of the Contractor to maintain appropriate erosion and siltation control devices in a functioning condition may result in the Engineer notifying the Contractor in writing of specific deficiencies. Deficiencies shall be corrected immediately. If the Contractor fails to correct or take appropriate actions to correct the specified deficiencies within 24 hours after receipt of such notification, the Department may do one or more of the following: require the Contractor to suspend work in other areas and concentrate efforts towards correcting the specified deficiencies, withhold payment of monthly progress estimates, or proceed to correct the specified deficiencies and deduct the entire cost of such work from monies due the Contractor. Failure on the part of the Contractor to maintain a Department certified erosion and sediment control employee within the project limits when land disturbance activities are being performed will result in the Engineer suspending work related to any land disturbance activity until such time as the Contractor is in compliance with this requirement.

Section 107.16(e) Storm Water Pollution Prevention Plan of the Specifications is replaced with the following:

(e) Storm Water Pollution Prevention Plan and Virginia Stormwater Management Program General Permit for the Discharge of Stormwater from Construction Activities

A Stormwater Pollution Prevention Plan (c) identifies potential sources of pollutants which may reasonably be expected to affect the stormwater discharges from the construction site and any off site support areas and describes and ensures implementation of practices which will be used to reduce pollutants in such discharges.

The SWPPP is comprised of, but not limited to, the Erosion and Sediment Control (ESC) Plan, the Stormwater Management (SWM) Plan and related Specifications and Standards contained within all contract documents and shall be required for all land-disturbing activities that disturb 10,000 square feet or greater, or 2,500 square feet or greater in Tidewater, Virginia.

Land-disturbing activities that disturb one acre or greater, or 2,500 square feet or greater in an area designated as a Chesapeake Bay Preservation Area, require coverage under the Department of Conservation and Recreation's Virginia Stormwater Management Program (VSMP) General Permit for the Discharge of Stormwater from Construction Activities (hereafter referred to as the VSMP Construction Permit). Where applicable, the Department will apply for and retain coverage under the VSMP Construction Permit for those land disturbing activities for which it has contractual control.

The required contents of a SWPPP for those land disturbance activities requiring coverage under the VSMP Construction Permit are found in Section II D of the General Permit section of the VSMP Regulations (4VAC50-60-1170). While a SWPPP is an important component of the VSMP Construction Permit, it is only one of the many requirements that must be addressed in order to be in full compliance with the conditions of the permit.

The Contractor and all other persons that oversee or perform activities covered by the VSMP Construction Permit shall be responsible for reading, understanding, and complying with all of the terms, conditions and requirements of the permit and the project's SWPPP including, but not limited to, the following:

1. Project Implementation Responsibilities

*These SPECIFICATIONS REVISIONS are subject to change on short notice.

The Contractor shall be responsible for the installation, maintenance, inspection, and, on a daily basis, ensuring the functionality of all erosion and sediment control measures and all other stormwater and pollutant runoff control measures identified within or referenced within the SWPPP, plans, Specifications, permits, and other contract documents.

The Contractor shall take all reasonable steps to prevent or minimize any stormwater or non-stormwater discharge that will have a reasonable likelihood of adversely affecting human health or public and/or private properties.

2. Certification Requirements

In addition to satisfying the personnel certification requirements contained herein, the Contractor shall certify his activities by completing, signing, and submitting Form C-45 VDOT SWPPP Contractor and Subcontractor Certification Statement to the Engineer at least 7 days prior to commencing any project related land-disturbing activities, both on-site and off-site.

3. SWPPP Requirements for Support Facilities

Where not included in the plans, the Contractor shall develop erosion and sediment control plan(s) and stormwater pollution prevention plan(s) for submission and acceptance by the Engineer prior to usage of any on-site or off-site support facilities including but not limited to, borrow and disposal areas, construction and waste material storage areas, equipment and vehicle storage and fueling areas, storage areas for fertilizers or chemicals, sanitary waste facilities and any other areas that may generate a stormwater or non-stormwater discharge directly related to the construction process. Such plans shall document the location and description of potential pollutant sources from these areas and shall include a description of the controls to reduce, prevent and control pollutants from these sources including spill prevention and response. The Contractor shall submit such plans and documentation as specified herein to the Engineer and, upon review and approval, they shall immediately become a component of the project's SWPPP and VSMP Construction Permit (where applicable) and shall be subject to all conditions and requirements of the VSMP Construction Permit (where applicable) and all other contract documents.

4. Reporting Procedures

a. Inspection Requirements

The Contractor shall be responsible for conducting inspections in accordance with the requirements herein. The Contractor shall document such inspections by completion of Form C-107 (a) and (b), Construction Runoff Control Inspection Form and Continuation Sheet, in strict accordance with the directions contained within the form.

b. Unauthorized Discharge Requirements

The Contractor shall not discharge into state waters sewage, industrial wastes, other wastes or any noxious or deleterious substances nor shall otherwise alter the physical, chemical, or biological properties of such waters that render such waters detrimental for or to domestic use, industrial consumption, recreational or other public uses.

(1) Notification of non-compliant discharges

The Contractor shall immediately notify the Engineer upon the discovery of or potential of any unauthorized, unusual, extraordinary, or non-compliant discharge from the land disturbing activity. Where immediate notification is not possible, such notification shall be not later than 24 hours after said discovery.

(2) Detailed report requirements for non-compliant discharges

The Contractor shall submit to the Engineer within 5 days of the discovery of any actual or potential non-compliant discharge a written report describing details of the discharge to include its volume, location, cause, and any apparent or potential effects on private and/or public properties and state waters or endangerment to public health, as well as steps being taken to eliminate the discharge. A completed Form C-107 (a) and (b) shall be included in such reports.

5. Changes, Deficiencies and Revisions

a. Changes and Deficiencies

The Contractor shall report to the Engineer when any planned physical alterations or additions are made to the land disturbing activity or deficiencies in the project plans or contract documents are discovered that could significantly change the nature or increase the quantity of the pollutants discharged from the land disturbing activity to surface waters.

b. Revisions to the SWPPP

Where site conditions, construction sequencing or scheduling necessitates revisions or modifications to the erosion and sediment control plan or any other component of the SWPPP for the land disturbing activity, such revisions or modifications shall be approved by the Engineer and shall be documented by the Contractor on a designated plan set (Record Set).

Such plans shall be maintained on the project site or at a location convenient to the project site where no on site facilities are available and shall be available for review upon request during normal business working hours.

Section 107.21—Size and Weight Limitations of the Specifications is amended to add the following:

- (d) **Construction Loading of Structures** - In the construction, reconstruction, widening, or repair of bridge, culvert, retaining wall and other similar type structures including approaches, the Contractor shall consider construction loads during the planning and prosecution of the work. If the loading capacity of these type structure(s) is not shown in the contract documents, the Contractor is responsible for contacting the office of the appropriate district bridge engineer to obtain the loading capacity information. Construction loads include but are not limited to the weight of cranes, trucks, other heavy construction or material delivery equipment, as well as the delivery or storage of materials placed on or adjacent to the structure or parts thereof during the various stages (phases) of the work in accordance with the Contractor's proposed work plan. The Contractor shall consider the effect(s) of construction loads on the loading capacity of these type structure(s) in his sequencing of the work and operations, including phase construction. At the Engineer's request the Contractor shall be prepared to discuss or review his proposed operations with the Engineer with regard to construction loads to demonstrate he has taken such into consideration in the planning and execution of the work.

SECTION 108—PROSECUTION AND PROGRESS OF WORK

Section 108.01—Prosecution of the Work of the Specifications is amended to replace the first paragraph with the following:

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The Contractor shall begin work on the Contract within 10 calendar days after the date selected by the Contractor as his Notice to Proceed date or within 10 calendar days after the specific Notice to Proceed date indicated in the Contract, unless otherwise altered or amended by specific language in the Contract or as permitted by the provisions of Section 105.01 or Section 108.02 of the Specifications.

Section 108.04—Determination and Extension of Contract Time Limit of the Specifications is amended to replace the second paragraph with the following:

With a fixed date contract when contract execution is not within 60 calendar days after the opening of bids, or when the Contractor is unable to commence work because of any failure of the Department, or when the Contractor is delayed because of the fault of the Department, the Contractor will be given an extension of time based on the number of days delayed beyond the 60 calendar days. No time extension will be allowed for a delay in the date of contract execution when the delay is the fault of the Contractor.

Section 108.04(a) Fixed Date of the Specifications is amended to add the following after the first paragraph as currently written:

If the Contract identifies a contract-specific Notice to Proceed date and the Contract is not executed by that date, the Contractor will receive an extension of time equal to the number of days between the contract-specific Notice to Proceed date and the eventual date of contract execution. If the Notice to Proceed date is selected by the Contractor and after prior approval the Engineer directs the Contractor not to begin work on that date, the Contractor will receive an extension of time equal to the number of days between the Contractor's selected Notice to Proceed date and the eventual date the Engineer informs the Contractor that he may commence the work.

Section 108.07—Default of Contract of the Specifications is amended to replace condition (a) with the following:

- (a) fails to begin the work under the Contract within 10 calendar days after the Contractor's selected Notice to Proceed date, or within 10 calendar days after a contract specific Notice to Proceed date indicated in the Contract, except as otherwise permitted by specific contract language or the provisions of Section 105.01 or Section 108.02 of the Specifications.

SECTION 109—MEASUREMENT AND PAYMENT

Section 109.01—Measurement by Weight is amended to replace the first paragraph and second paragraph including subparagraphs 1-4 with the following:

- (a) **Measurement by Weight:** Materials that are measured or proportioned by weight shall be weighted on accurate scales as specified in this Section. When material is paid for on a tonnage basis, personnel performing the weighing shall be certified by the Department and shall be bonded to the Commonwealth of Virginia in the amount of \$10,000 for the faithful observance and performance of the duties of the weighperson required herein. The bond shall be executed on a form having the exact wording as the Weighpersons Surety Bond Form furnished by the Department and shall be submitted to the Department prior to the furnishing of the tonnage material.

The Contractor shall have the weighperson perform the following:

1. Furnish a signed weigh ticket for each load that shows the date, load number, plant name, size and type of material, project number, schedule or purchase order number, and the weights specified herein.

2. Maintain sufficient documentation so that the accumulative tonnage and distribution of each lot of material, by contract, can be readily identified.
3. Submit by the end of the next working day a summary of the number of loads and total weights for each type of material by contract.

Section 109.09—Payment For Material On Hand of the Specifications is replaced with the following:

When requested in writing by the Contractor, payment allowances may be made for material secured for use on the project. Such material payments will be for only those actual quantities identified in the contract, approved work orders, or otherwise **authorized and documented by the Engineer** as required to complete the project and shall be in accordance with the following terms and conditions:

- (a) **Structural Steel or Reinforcing Steel:** An allowance of 100 percent of the cost to the Contractor for structural steel **or reinforcing steel** materials secured for fabrication not to exceed 60 percent of the contract price may be made when such material is delivered to the fabricator and has been adequately identified for exclusive use on the project. **The provisions of this section for steel reinforcement will only apply where the quantity of steel reinforcement is identified as a separate and distinct bid item for payment.** An allowance of 100 percent of the cost to the Contractor for superstructure units and reinforcing steel, not to exceed 90 percent of the contract price, may be made when fabrication is complete. Prior to the granting of such allowances, the materials and fabricated units shall have been tested or certified and found acceptable to the Department and shall have been stored in accordance with the requirements specified herein. Allowances will be based on invoices, bills, or the estimated value as approved by the Engineer and will be subject to the retainage requirements of Section 109.08. **For the purposes of this section fabrication is defined as any manufacturing process such as bending, forming, welding, cutting or coating with paint or anti-corrosive materials which alters, converts, or changes raw material for its use in the permanent finished work.**
- (b) **Other Materials:** For aggregate, pipe, guardrail, signs and sign assemblies, and other nonperishable material, an allowance of 100 percent of the cost to the Contractor for materials, not to exceed 90 percent of the contract price, may be made when such material is delivered **to the project** and stockpiled or stored in accordance with the requirements specified herein. Prior to the granting of such allowances, the material shall have been tested and found acceptable to the Department. Allowances will be based on invoices, bills, or the estimated value of the material as approved by the Engineer and will be subject to the retainage provisions of Section 109.08.
- (c) **Excluded Items:** No allowance will be made for fuels, form lumber, falsework, temporary structures, or other work that will not become an integral part of the finished construction. **Additionally, no allowance will be made for perishable material such as cement, seed, plants, or fertilizer.**
- (d) **Storage:** Material for which payment allowance is requested shall be stored in an approved manner in areas where damage is not likely to occur. If any of the stored materials are lost or become damaged, the Contractor shall repair or replace them **at no additional cost to the Department. Repair or replacement of such material will not be considered the basis for any extension of contract time.** If payment allowance has been made prior to such damage or loss, the amount so allowed or a proportionate part thereof will be deducted from the next progress estimate payment and withheld until satisfactory repairs or replacement has been made.

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When it is determined to be impractical to store materials within the limits of the project, the Engineer may approve storage on private property or, for structural units and reinforcing steel, on the manufacturer's or fabricator's yard. Requests for payment allowance for such **stored** material shall be accompanied by a release from the owner or tenant of such property or yard agreeing to permit the removal of the materials from the property without cost to the Commonwealth.

- (e) **Materials Inventory:** If the Contractor requests a payment allowance for properly stored material, he shall submit a certified and itemized inventory statement to the Engineer no earlier than five days and no later than two days prior to the progress estimate date. The statement shall be submitted on forms furnished by the Department and shall be accompanied by **supplier's or manufacturer's** invoices or other documents that will verify the material's cost. Following the initial submission, the Contractor shall submit to the Engineer a monthly-certified update of the itemized inventory statement within the same time frame. The updated inventory statement shall show additional materials received and stored with invoices or other documents and shall list materials removed from storage since the last certified inventory statement, with appropriate cost data reflecting the change in the inventory. If the Contractor fails to submit the monthly-certified update within the specified time frame, the Engineer will deduct the full amount of the previous statement from the progress estimate.

At the conclusion of the project, the cost of material remaining in storage for which payment allowance has been made will be deducted from the progress estimate.

GUIDELINES — ALL METRIC UNIT PROJECTS ONLY. END USE WITH THE JUNE 2010 ADVERTISEMENT. WHEN THIS PROVISION APPLIES INCLUDE THE FOLLOWING IN THE PROPOSAL: c100am00 Gen Proj Requirements (Metric)

SSMCON00-0409

November 17, 2008

VIRGINIA DEPARTMENT OF TRANSPORTATION
2007 ROAD AND BRIDGE SUPPLEMENTAL SPECIFICATIONS

IMPERIAL UNIT TO METRIC UNIT CONVERSION

I. GENERAL

This Supplemental Specification is included in this specific project because the Department has identified the units of measure to be used as metric units only. The methods of conversion from imperial units into metric units required herein shall be used to convert only the specific units of measure in the Contract that are expressed only in imperial units.

Any imperial unit of measure in the contract documents with an accompanying expression in a metric unit shall be referred to hereinafter as a “dual unit” measurement. Such a “dual unit” measurement is typically expressed first in the imperial unit followed immediately to the right by the metric unit in parenthesis “()” or brackets “[]” where parenthesis is used in the sentence to convey other information. Where “dual units” of measure appear in this project, only the metric units shall apply. The imperial unit shown is not to be considered interchangeable and mathematically convertible to the metric unit and shall not be used as an alternate or conflicting measurement.

If conflicting measurements of the same item appear in two separate places in the Contract with one measurement being a solitary metric unit measurement expressed only as a “single unit” or as the second part of a “dual unit” (imperial/metric) measurement and, the conflicting measurement is a metric unit measurement converted from an imperial unit measurement using this Supplemental Specification; the metric unit measurement expressed as a “single unit” or as part of a “dual unit” shall apply.

Any obvious or apparent error or omission shall be corrected in accordance with the requirements of Section 105.12 of the Specifications.

The conversion methods herein shall apply to the following:

- The *Virginia Department of Transportation Road and Bridge Specifications* book, dated 2007; and the *Virginia Work Area Protection Manual*, dated May 1, 2005.
- All Supplemental Specifications, Special Provisions, Special Provision Copied Notes, and other contract documents included in the Contract containing any use of imperial units of measure without an accompanying metric unit of measure.

The conversions herein shall not apply to the following:

- The *1996 Road and Bridge Standards* and its accompanying revisions because both are metric-unit only publications.
- That portion of any Supplemental Specification, Special Provision, Special Provision Copied Note, or other contract document included in the Contract using only a metric unit of measure.

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- That portion of any Supplemental Specification, Special Provision, Special Provision Copied Note, or other contract document where "dual unit" (imperial/metric) measurements are used.
- The plans, as defined in Section 101.02 of the Specifications. Such plans are expressed only in metric units for this project.
- The "Schedule of Items" in the Contract. The quantities and units of measure of such items in the "Schedule of Items" are expressed only in metric units for this project.

II. IMPERIAL UNIT TO METRIC UNIT CONVERSION

The table herein was developed as a tool for the specific purpose of converting measurements and units in the Contract expressed only as imperial units into the metric units required for this project. Such conversions shall only apply to those measurements and units specifically designated in the requirements of Section I of this special provision.

The units of measure, terms and abbreviations used in the table herein do not represent every conceivable imperial or metric unit of measure, term and abbreviation. Such used in the table herein represents what typically appear in a broad range of Department projects. The Contractor or Engineer may discover an imperial unit of measure, term and abbreviation in the Contract requiring conversion to metric in accordance with the requirements of Section I of this special provision that is not included in the table herein. If such occurs the Contractor shall submit to the Engineer for his/her approval the method of conversion and its source, the metric unit and resulting measurement.

Rounding of converted measurements shall be performed in a manner that establishes metric unit measurements that best reflect the intent of the measurements originally expressed in imperial units.

When nominal imperial unit measurements, such as pipe or aggregate sizes, are converted; the resulting measurement shall be for the purpose of clearly identifying the corresponding nominal metric unit measurements for that item.

Any obvious or apparent error or omission in converting the units of measure from imperial to metric in accordance with the requirements of the table herein shall be corrected in accordance with the requirements of Section 105.12 of the Specifications.

Converting the units of measure from imperial to metric in accordance with the requirements herein and of Section I of this special provision shall be performed in accordance with the follow table:

TABLE OF IMPERIAL UNIT TO METRIC UNIT CONVERSION FORMULAS

FROM IMPERIAL UNIT (<u>IU</u>)	FORMULA	TO METRIC UNIT (<u>MU</u>)
DISTANCE	=====	DISTANCE
<u>Linear foot</u> , ft	<u>IU</u> x .3048 = <u>MU</u>	<u>Meter</u> , m
<u>Inch</u> , in	<u>IU</u> x 25.4 = <u>MU</u>	<u>Millimeter</u> , mm ³
<u>Microinches</u>	<u>IU</u> x .0254 = <u>MU</u>	<u>Micrometer</u> , μ m
<u>Microinches</u>	<u>IU</u> x 0.0000254 = <u>MU</u>	<u>Millimeter</u> , mm

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FROM IMPERIAL UNIT (<u>IU</u>)	FORMULA	TO METRIC UNIT (<u>MU</u>)
<u>Mile</u> , mi (U.S. Statute)	$IU \times 1.60934 = MU$	<u>Kilometer</u> , km
<u>Station</u> (100 feet)	$IU \times .3048 = MU$	<u>Station</u> (100 meters)
<u>Yard</u> , yd	$IU \times 0.9144 = MU$	<u>Meter</u> , m
DISTANCE (THICKNESS)	=====	DISTANCE (THICKNESS)
<u>Mil</u> (.001 inch)	$IU \times .0000254 = MU$	<u>Meter</u> , m
<u>Mil</u> (.001 inch)	$IU \times 0.0254 = MU$	<u>Millimeter</u> , mm
<u>Mil</u> (.001 inch)	$IU \times 25.4 = MU$	<u>Micrometer</u> , <u>Micron</u> (.000001 meter), μm
SLOPE RATE	=====	SLOPE RATE
<u>Inch per foot</u> , in/ft	$IU \times 25.4 \times 3.2808399 = MU$	<u>Millimeters per meter</u> , mm/m
SLOPE RATE (AVERAGE)	=====	SLOPE RATE (AVERAGE)
<u>Inches per mile</u> International Roughness Index (IRI)	$IU \times 25.4 \times 0.62137 = MU$	<u>Millimeters per Kilometer</u> , mm/km International Roughness Index (IRI)
AREA	=====	AREA
<u>Acre</u> , ac	$IU \times 0.4046873 = MU$	<u>Hectare</u> , ha
<u>Square foot</u> , ft ²	$IU \times 92903.04 = MU$	<u>Square millimeter</u> , mm ²
<u>Square foot</u> , ft ²	$IU \times .092903 = MU$	<u>Square meter</u> , m ²
<u>Square inch</u> , in ²	$IU \times 6.4516 = MU$	<u>Square centimeter</u> , cm ²
<u>Square mile</u> , mi ²	$IU \times 2.589988 = MU$	<u>Square kilometer</u> , km ²
<u>Square yard</u> , yd ²	$IU \times 0.8361274 = MU$	<u>Square meter</u> , m ²
<u>Square yard</u> , yd ²	$IU \times 8361.274 = MU$	<u>Square centimeter</u> , cm ²
<u>Unit</u> (1,000 square feet)	$IU \times 1.07639 = MU$	<u>Unit</u> (100 square meters)
<u>Unit</u> (100 square feet)	$IU \times 1 = MU$	<u>Unit</u> (9.2 square meters)
<u>Unit</u> (100 square feet)	$IU \times 1.07639 = MU$	<u>Unit</u> (10 square meters)
<u>Board-foot</u>	$IU \times 0.002359737 = MU$	<u>Cubic meter</u> , m ³
1,000 foot-board-measure, MFBM	$IU \times 2.359737 = MU$	<u>Cubic meter</u> , m ³
VOLUME	=====	VOLUME
<u>Cubic foot</u> , ft ³	$IU \times 0.02831685 = MU$	<u>Cubic meter</u> , m ³
<u>Cubic Inch</u> , in ³	$IU \times 16.38706 = MU$	<u>Cubic centimeter</u> , cm ³
<u>Cubic yard</u> , yd ³	$IU \times 0.7645549 = MU$	<u>Cubic meter</u> , m ³
VOLUME (U.S. LIQUID)	=====	VOLUME (LIQUID)
<u>Fluid ounce</u> , fl oz	$IU \times 29.57353 = MU$	<u>Milliliter</u> , ml

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FROM IMPERIAL UNIT (<u>IU</u>)	FORMULA	TO METRIC UNIT (<u>MU</u>)
<u>Gallon</u> , gal	$\text{IU} \times 3.7854 = \text{MU}$	<u>Liter</u> , l
<u>Ounce</u> , oz	$\text{IU} \times 29.57353 = \text{MU}$	<u>Milliliter</u> , ml
<u>Pint</u> , pt	$\text{IU} \times 0.47318 = \text{MU}$	<u>Liter</u> , l
<u>Pint</u> , pt	$\text{IU} \times 473.1765 = \text{MU}$	<u>Milliliter</u> , ml
<u>Quart</u> , qt	$\text{IU} \times 0.94635 = \text{MU}$	<u>Liter</u> , l
<u>Unit</u> (1,000 gallons)	$\text{IU} \times 1 = \text{MU}$	<u>Unit</u> (3,785 liters)
MASS (WEIGHT)	=====	MASS
<u>Ounce</u> , oz	$\text{IU} \times 28.34952 = \text{MU}$	<u>Gram</u> , g
<u>Ounce</u> , oz	$\text{IU} \times 0.02834952 = \text{MU}$	<u>Kilogram</u> , kg
<u>Pound</u> , lb	$\text{IU} \times 0.45359 = \text{MU}$	<u>Kilogram</u> , kg
<u>Ton</u> (Short=2000 lbs)	$\text{IU} \times 0.9071847 = \text{MU}$	<u>Metric ton</u>
<u>Ton</u> (Short=2000 lbs)	$\text{IU} \times 907.1847 = \text{MU}$	<u>Kilogram</u> , kg
<u>Tonnage</u>	$\text{IU} \times 0.9071847 = \text{MU}$	<u>Metric tonnage</u>
<u>Weight</u>	Equivalent Terms	<u>Mass</u>
MASS (APPLIED RATE)	=====	MASS (APPLIED RATE)
<u>Pounds per linear foot</u> , lb/ft	$\text{IU} \times 0.45359 \times 3.2808399 = \text{MU}$	<u>Kilograms per meter</u> , kg/m
<u>Pounds per linear foot</u> , lb/ft	$\text{IU} \times 453.5924 \times 3.28084 = \text{MU}$	<u>Grams per meter</u> , g/m
<u>Tons per inch</u>	$\text{IU} \times 907.1847 \times .03937 = \text{MU}$	<u>Kilograms per millimeter</u> , kg/mm
DENSITY	=====	DENSITY
<u>Pounds per cubic foot</u> , lb/ft ³	$\text{IU} \times 0.45359 \times 35.314662 = \text{MU}$	<u>Kilograms per cubic meter</u> , kg/m ³
<u>Pounds per cubic yard</u> , lb/yd ³	$\text{IU} \times 0.45359 \times 1.3079505 = \text{MU}$	<u>Kilograms per cubic meter</u> , kg/m ³
<u>Pounds per gallon</u> , lb/gal	$\text{IU} \times 453.5924 \times 0.264172 = \text{MU}$	<u>Grams per liter</u> , g/l
<u>Pounds per gallon</u> , lb/gal	$\text{IU} \times 0.45359 \times 0.264172 = \text{MU}$	<u>Kilograms per liter</u> , kg/l
<u>Pounds per gallon</u> , lb/gal	$\text{IU} \times 0.45359 \times .264172 = \text{MU}$	<u>Kilograms per liter</u> , kg/l
FORCE	=====	FORCE
<u>Kip</u> (1000 pound-force, lbf)	$\text{IU} \times 4.448222 = \text{MU}$	<u>Kilonewton</u> , kN
<u>Pound</u> , lbf	$\text{IU} \times 4.448222 = \text{MU}$	<u>Newton</u> , N
<u>Pound</u> , lbf	$\text{IU} \times 0.004448222 = \text{MU}$	<u>Kilonewton</u> , kN
<u>Poundal</u>	$\text{IU} \times 0.1382550 = \text{MU}$	<u>Newton</u> , N
<u>Pounds per inch</u> , lb/in	$\text{IU} \times 0.00445 \times 39.37008 = \text{MU}$	<u>Kilonewtons per meter</u> , kN/m
<u>Pounds per linear foot</u> , lb/lf	$\text{IU} \times 0.0044482 \times 3.28084 = \text{MU}$	<u>Kilonewtons per meter</u> , kN/m

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FROM IMPERIAL UNIT (<u>IU</u>)	FORMULA	TO METRIC UNIT (<u>MU</u>)
<u>Ton</u> (2000 pound-force, lbf)	<u>IU</u> x 8896.444 = <u>MU</u>	<u>Newton</u> , N
PRESSURE	=====	PRESSURE
<u>Ounces per square foot</u> , oz/ft ²	<u>IU</u> x 28.34952 x 10.76391 = <u>MU</u>	<u>Grams per square meter</u> , g/m ²
<u>Ounces per square yard</u> , oz/yd ²	<u>IU</u> x 0.028349 x 1.19599 = <u>MU</u>	<u>Kilograms per square meter</u> , kg/m ²
<u>Pounds per square foot</u> , lb/ft ²	<u>IU</u> x 4.882428 x 10.7639 = <u>MU</u>	<u>Kilograms per square meter</u> , kg/m ²
<u>Pounds per square inch</u> , lb/in ²	<u>IU</u> x 0.006894757 = <u>MU</u>	<u>Megapascals</u> , MPa
<u>Pounds per square inch</u> , lb/in ²	<u>IU</u> x 6.894757 = <u>MU</u>	<u>Kilopascals</u> , kPa
<u>Pounds per square yard</u> , lb/yd ²	<u>IU</u> x 0.0004536 x 11959.9 = <u>MU</u>	<u>Metric tons per hectare</u>
<u>Pounds per square yard</u> , lb/yd ²	<u>IU</u> x 0.45359 = <u>MU</u>	<u>Kilograms per square meter</u> , kg/m ²
WORK	=====	WORK
<u>Foot poundal</u>	<u>IU</u> x 0.04214011 = <u>MU</u>	<u>Joule</u> (J)
<u>Foot-pound</u> , ft-lbf	<u>IU</u> x 0.3048 x 4.448222 = <u>MU</u>	<u>Newtonmeters</u> , Nm
<u>Foot-pound</u> , ft-lbf	<u>IU</u> x 1.355818 = <u>MU</u>	<u>Joule</u> (J)
<u>Inch-pound</u> , in-lbf	<u>IU</u> x .08333 x 1.355818 = <u>MU</u>	<u>Joule</u> (J)
<u>Watt-hour</u> , Wh	<u>IU</u> x 0.0036 = <u>MU</u>	<u>Joule</u> (J)
<u>Kilowatt-hour</u> , kWh	<u>IU</u> x 0.0000036 = <u>MU</u>	<u>Joule</u> (J)
WORK RATE	=====	WORK RATE
<u>Foot-pounds (25) at +10°F</u>	<u>Equivalent</u>	<u>Joules (34) at -12°C</u>
<u>Foot-pounds per inch</u> (ft-lbf/in)	<u>IU</u> x 1.355818 x 39.37007 = <u>MU</u>	<u>Joules per meter</u> , J/m
<u>Foot-pounds per inch</u> (ft-lbf/in)	<u>IU</u> x 1.355818 x 39.37007 = <u>MU</u>	<u>Newtonmeters per meter</u> , Nm/m
<u>Foot-pounds per pound</u> (ft-lbf/lbf)	<u>IU</u> x 1.355818 x 4.448222 = <u>MU</u>	<u>Joules per newton</u> , J/n
<u>Kips per foot</u>	<u>IU</u> x 4.448222 x 3.28084 = <u>MU</u>	<u>Kilonewtons per meter</u> , kN/m
<u>Kips per square inch</u>	<u>IU</u> x 4.448222 x 0.155 = <u>MU</u>	<u>Kilonewtons per square centimeter</u> , kN/cm ²
POWER	=====	POWER
<u>Foot-pound per second</u> , ft-lbf/s	<u>IU</u> x 1.355818 = <u>MU</u>	<u>Joule per second</u> , J/s
<u>Watt</u> , W	<u>IU</u> x 1 = <u>MU</u>	<u>Joule per second</u> , J/s
FLOW	=====	FLOW
<u>Cubic feet per second</u> , cfs	<u>IU</u> x 0.02831685 = <u>MU</u>	<u>Cubic meters per Second</u> , m ³ /s
<u>Gallons per minute</u> , gpm	<u>IU</u> x 0.0000630902 = <u>MU</u>	<u>Cubic meters per Second</u> , m ³ /s
<u>Gallons per minute</u> , gpm	<u>IU</u> x 3.7854 x 0.016667 = <u>MU</u>	<u>Liters per second</u> , l/s
<u>Gallons per minute per foot</u> , gpm/ft	<u>IU</u> x 3.7854 x 3.2808399 = <u>MU</u>	<u>Liters per minute per meter</u> , l/m/m

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FROM IMPERIAL UNIT (<u>IU</u>)	FORMULA	TO METRIC UNIT (<u>MU</u>)
FLOW (PER OPENING AREA)	=====	FLOW (PER OPENING AREA)
<u>Cubic Feet per Second per square foot, cfs/ft²</u>	$IU \times 0.02831685 \times 10.76394 = MU$	<u>Cubic meters per second per square meter, m³/s/ m²</u>
VELOCITY	=====	VELOCITY
<u>Feet per second, ft/s</u>	$IU \times .3048 = MU$	<u>Meters per second, m/s</u>
<u>Miles per hour, mph</u>	$IU \times 1.60934 = MU$	<u>Kilometers per hour, kph</u>
ACCELERATION	=====	ACCELERATION
<u>Feet per second per second, ft/s/s</u>	$IU \times .3048 = MU$	<u>Meters per second per second, m/s/s</u>
TEMPERATURE	=====	TEMPERATURE
<u>Fahrenheit, °F</u>	$(IU \text{ minus } 32) \times 0.5556 = MU$	<u>Celsius, °C</u>
COEFFICIENT OF EXPANSION		COEFFICIENT OF EXPANSION
<u>Foot per degree F, ft/°F</u>	$IU \times .3048 \times 1.8 = MU$	<u>Meters per degree C, m/°C</u>
LIGHT	=====	LIGHT
<u>Foot-candle</u>	$IU \times 10.76391 = MU$	<u>Lux, lx</u>
LIGHT (EXPOSURE RATE)	=====	LIGHT (EXPOSURE RATE)
<u>Candelas (or Candles) per foot-candle per square foot</u>	$IU \times 10.76391 \times 10.76391 = MU$	<u>Candelas (or Candles) per lux per square meter, cd/lx/m²</u>
<u>Millicandelas per square foot per foot-candle</u>	$IU \times 10.76391 \times 10.7639 = MU$	<u>Millicandelas per square meter per lux, mcd/m²/lx</u>
<u>Millicandelas (100) per square foot per foot-candle</u>	$IU \times 10.76391 \times 10.7639 = MU$	<u>Millicandelas (100) per square meter per lux, 100mcd/m²/lx</u>
STANDARD SIZES	=====	STANDARD SIZES
<u>Class A3 Concrete</u>	<u>Equivalent</u>	<u>Class 20 Concrete</u>
<u>Class A3.5 Concrete</u>	<u>Equivalent</u>	<u>Class 25 Concrete</u>
<u>Class A4 Concrete</u>	<u>Equivalent</u>	<u>Class 30 Concrete</u>
<u>Class A4.5 Concrete</u>	<u>Equivalent</u>	<u>Class 35 Concrete</u>
<u>Class A5 Concrete</u>	<u>Equivalent</u>	<u>Class 35-60 by 5's Concrete</u>
<u>Class B2 Concrete</u>	<u>Equivalent</u>	<u>Class 15 Concrete</u>
<u>Class C1 Concrete</u>	<u>Equivalent</u>	<u>Class 10 Concrete</u>
<u>Class T3 Concrete</u>	<u>Equivalent</u>	<u>Class 20T Concrete</u>
<u>Gage, 06 (Gauge) (Diameter)</u>	<u>Equivalent</u>	<u>4.88 Millimeter</u>
<u>Gage, 09 (Gauge) (Diameter)</u>	<u>Equivalent</u>	<u>3.76 Millimeter</u>
<u>Gage, 12 (Gauge) (Diameter)</u>	<u>Equivalent</u>	<u>2.67 Millimeter</u>
<u>Gage, 07 (Gauge) (Thickness)</u>	<u>Equivalent</u>	<u>4.5 Millimeter</u>

*These SPECIFICATIONS REVISIONS are subject to change on short notice.

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FROM IMPERIAL UNIT (<u>IU</u>)	FORMULA	TO METRIC UNIT (<u>MU</u>)
<u>Gage, 10 (Gauge) (Thickness)</u>	<u>Equivalent</u>	<u>3 Millimeter</u>
<u>Gage, 12 (Gauge) (Thickness)</u>	<u>Equivalent</u>	<u>2.8 Millimeter</u>
<u>Gage, 13 (Gauge) (Thickness)</u>	<u>Equivalent</u>	<u>2.32 Millimeter</u>
<u>Gage, 14 (Gauge) (Diameter)</u>	<u>Equivalent</u>	<u>2.0 Millimeter</u>
<u>Gage, 16 (Gauge) (Thickness)</u>	<u>Equivalent</u>	<u>1.55 Millimeter</u>
<u>Gage, 18 (Gauge) (Thickness)</u>	<u>Equivalent</u>	<u>1.3 Millimeter</u>
<u>Gage, 20 (Gauge) (Thickness)</u>	<u>Equivalent</u>	<u>0.9 Millimeter</u>
<u>Inch (Bolts)</u>	<u>Equivalent</u>	<u>See specific metric replacements</u>
<u>Sieve, 1 inch</u>	<u>Equivalent</u>	<u>Sieve, 25 millimeter</u>
<u>Sieve, 1/2 inch</u>	<u>Equivalent</u>	<u>Sieve, 12.5 millimeter</u>
<u>Sieve, 1-1/2 inch</u>	<u>Equivalent</u>	<u>Sieve, 37.5 millimeter</u>
<u>Sieve, 2 inch</u>	<u>Equivalent</u>	<u>Sieve, 50 millimeter</u>
<u>Sieve, 2-1/2 inch</u>	<u>Equivalent</u>	<u>Sieve, 63.5 millimeter</u>
<u>Sieve, 3 inch</u>	<u>Equivalent</u>	<u>Sieve, 75 millimeter</u>
<u>Sieve, 3/4 inch</u>	<u>Equivalent</u>	<u>Sieve, 19 millimeter</u>
<u>Sieve, 3/8 inch</u>	<u>Equivalent</u>	<u>Sieve, 9.5 millimeter</u>
<u>Sieve, 3-1/2 inch</u>	<u>Equivalent</u>	<u>Sieve, 90 millimeter</u>
<u>Sieve, 4 inch</u>	<u>Equivalent</u>	<u>Sieve, 100 millimeter</u>
<u>Sieve, No. 04</u>	<u>Equivalent</u>	<u>Sieve, 4.75 millimeter</u>
<u>Sieve, No. 08</u>	<u>Equivalent</u>	<u>Sieve, 2.36 millimeter</u>
<u>Sieve, No. 100</u>	<u>Equivalent</u>	<u>Sieve, 150µm [aka micrometer, micron (.001mm)]</u>
<u>Sieve, No. 100</u>	<u>Equivalent</u>	<u>Sieve, 150µm [aka micrometer, micron (.001mm)]</u>
<u>Sieve, No. 16</u>	<u>Equivalent</u>	<u>Sieve, 1.18 millimeter</u>
<u>Sieve, No. 20</u>	<u>Equivalent</u>	<u>Sieve, 850µm [aka micrometer, micron (.001mm)]</u>
<u>Sieve, No. 200</u>	<u>Equivalent</u>	<u>Sieve, 75 millimeter</u>
<u>Sieve, No. 200</u>	<u>Equivalent</u>	<u>Sieve, 75µm [aka micrometer, micron (.001mm)]</u>
<u>Sieve, No. 30</u>	<u>Equivalent</u>	<u>Sieve, 600 millimeter</u>
<u>Sieve, No. 300</u>	<u>Equivalent</u>	<u>Sieve, 270µm [aka micrometer, micron (.001mm)]</u>
<u>Sieve, No. 40</u>	<u>Equivalent</u>	<u>Sieve, 425µm [aka micrometer, micron (.001mm)]</u>
<u>Sieve, No. 50</u>	<u>Equivalent</u>	<u>Sieve, 300 millimeter</u>

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FROM IMPERIAL UNIT (<u>IU</u>)	FORMULA	TO METRIC UNIT (<u>MU</u>)
<u>Sieve, No. 60</u>	<u>Equivalent</u>	<u>Sieve, 250µm [aka micrometer, micron (.001mm)]</u>
<u>Sieve, No.10</u>	<u>Equivalent</u>	<u>Sieve, 2.00 millimeter</u>
IMPACT STRENGTH	=====	IMPACT STRENGTH
<u>Pounds (force) per inch, lbf/in</u>	<u>IU x 4.448222 x .03937 = MU</u>	<u>Newtons per millimeter, N/mm</u>
ABSORPTION RATE	=====	ABSORPTION RATE
<u>Liters per mil</u>	<u>IU x 39.37 = MU</u>	<u>Liters per millimeter, l/mm</u>
APPLICATION RATES	=====	APPLICATION RATES
<u>Gallons per cubic yard, gal/yd³</u>	<u>IU x 3.7854 x 0.764555 = MU</u>	<u>Liters per cubic meter, l/m³</u>
<u>Gallons per square foot, gal/ft²</u>	<u>IU x 3.7854 x 10.76391 = MU</u>	<u>Liters per square meter, l/m²</u>
<u>Gallons per square yard, gal/yd²</u>	<u>IU x 3.7854 x 1.19598999 = MU</u>	<u>Liters per square meter, l/m²</u>
<u>Gallons per ton</u>	<u>IU x 3.7854 x 0.9071847 = MU</u>	<u>Liters per metric ton</u>
<u>Inch per second per 0.1 inch</u>	<u>IU x 25.4 x 393.7007 = MU</u>	<u>Millimeters per second per meter, mm/s/m</u>
<u>Pounds per 100 square foot</u>	<u>IU x 0.45359 x 1 = MU</u>	<u>Kilograms per 9.29 square meters</u>
<u>Pounds per acre, lb/ac</u>	<u>IU x 0.45359 x 2.47104 = MU</u>	<u>Kilograms per hectare, kg/ha</u>
<u>Pounds per square foot per hour, lb/ft²/h</u>	<u>IU x 4.88243 x 10.76391 = MU</u>	<u>Kilograms per square meter per hour, kg/m²/h</u>
<u>Pounds per square yard per inch, lb/yd²/in</u>	<u>IU x 0.45359 x 0.8361274 = MU</u>	<u>Kilograms per square meter (25-millimeter nominal application rate)</u>
<u>Pounds per square yard per inch, lb/yd²/in</u>	<u>IU x 0.4536 x 0.8361 x 0.03937 = MU</u>	<u>Kilograms per square meter per millimeter, kg/m²/mm</u>
<u>Square foot per gallon, ft²/gal</u>	<u>IU x 0.092903 x 0.264172 = MU</u>	<u>Square meters per liter, m²/l</u>
<u>Tons per acre</u>	<u>IU x 0.9071847 x 2.47104 = MU</u>	<u>Metric tons per hectare</u>

III. SPECIFIC METRIC REPLACEMENTS

The *Virginia Department of Transportation Road and Bridge Specifications* book, dated 2007 and the Special Provisions contain specific elements such as tables, nomographs and forms that, as they appear in those imperial-only unit documents, are difficult to convert to metric units using only a conversion method. The following are metric unit replacements for specific imperial units in this Contract:

A. The **VIRGINIA DEPARTMENT OF TRANSPORTATION ROAD AND BRIDGE SPECIFICATIONS** book, dated 2007

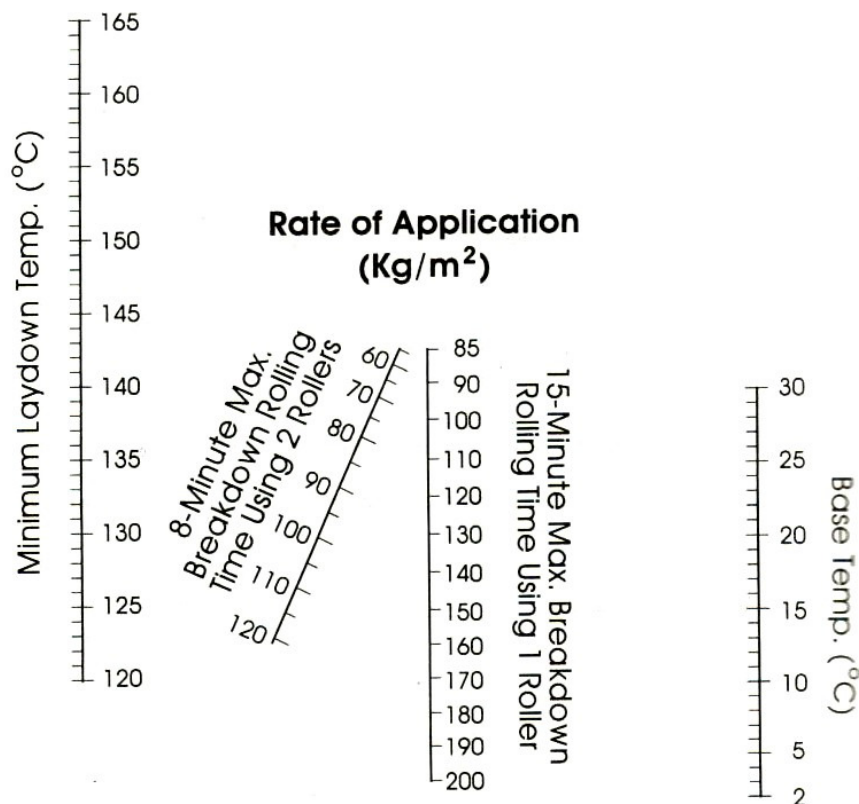
Table III-2, Cold Weather Paving Limitations

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The imperial-only unit nomograph titled “**Table III-2, Cold Weather Paving Limitations**” in the *Virginia Department of Transportation Road and Bridge Specifications* book, dated 2007 is replaced with the following:

TABLE III-2
Cold Weather Paving Limitations
Asphalt Concrete Paving Limitations



Section 226.02(h) High-Strength Bolts in the 2007 Road and Bridge Specifications book

Section 226.02(h)b. and **Section 226.02(h)c.** of the Specifications are replaced with the following:

- b. During this test, the minimum recorded tension shall be at least 1.15 times the required bolt proof load as specified in ASTM A325 and A490:

1.15 x Proof Load (kN)		
Bolt Size	325	A490
M16x2	108.3	149
M20x2.5	169	233
M22x2.5	209	288

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M24x3	244	337
M27x3	316	438
M30x3.5	387	536
M36x4	563	780

- c. The measured torque to produce the required fastener tension shall not exceed the value obtained by the following equation:

$$\text{Torque} = 0.25 PD$$

Where:

Torque = measured torque (newtonmeters)

P = measured bolt tension (newtons)

D = nominal diameter (meters).

Max. Torque 1.15 x Proof Load (Nm)		
Bolt Size	A325	A490
M16x2	430	600
M20x2.5	850	1170
M22x2.5	1150	1580
M24x3	1460	2020
M27x3	2130	2960
M30x3.5	2900	4020
M36x4	5070	7020

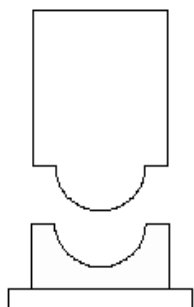
B. The Special Provision for WAVE EQUATION ANALYSIS

The form titled “**Pile and Driving Equipment Data Form**” in the Special Provision for **Wave Equation Analysis** is replaced with the following:

Attachment 1

VIRGINIA DEPARTMENT OF TRANSPORTATION PILE AND DRIVING EQUIPMENT DATA FORM

Project: _____
 Pile Driving Contractor Or Subcontractor (Driven by): _____



HAMMER Manufacture: _____ Model: _____
 Type: _____
 Rated Energy: _____ @ _____ Length of Stroke
 Modifications: _____

RAM Ram Mass: _____

ANVIL OR BASE Mass: _____

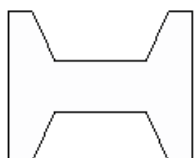
STRIKER PLATE Material: _____
 Thickness: _____ Area: _____
 Modulus of Elasticity - E: _____ (kpa)
 Coefficient of Restitution: _____



CAP BLOCK Material: _____
 Thickness: _____ Area: _____
 Modulus of Elasticity - E: _____ (kpa)
 Coefficient of Restitution: _____



PILE CAP Helmet _____ Mass: _____
 Bonnet _____ Materials: _____
 Anvil Block _____
 Remarks: _____
 Drive head _____
 Accessories _____



CUSHION Cushion Material: _____
 Thickness: _____ Area: _____
 Modulus of Elasticity - E: _____ (kpa)
 Coefficient of Restitution: _____



PILE Type: _____
 Pile Size: _____ Length: _____ Diameter: _____
 Cross Sectional Area: _____
 Material: _____ Mass/m: _____
 Design Pile Capacity: _____ metric tons
 Description of Splice: _____

Tip Treatment Description: _____

Remarks: _____

Submitted By: _____ Date: _____
 Company: _____ Phone: _____

Cc: District Bridge Engineer
 State Bridge Engineer
 Construction Manager

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GUIDELINES — ALL METRIC UNIT PROJECTS ONLY. BEGIN USE WITH THE JULY 2010 ADVERTISEMENT. WHEN THIS PROVISION APPLIES INCLUDE THE FOLLOWING IN THE PROPOSAL: c100am01 Gen Proj Requirements (Metric)

SSMCON01-0710

January 13, 2010

VIRGINIA DEPARTMENT OF TRANSPORTATION
2007 ROAD AND BRIDGE SUPPLEMENTAL SPECIFICATIONS

IMPERIAL UNIT TO METRIC UNIT CONVERSION

I. GENERAL

This Supplemental Specification is included in this specific project because the Department has identified the units of measure to be used as metric units only. The methods of conversion from imperial units into metric units required herein shall be used to convert only the specific units of measure in the Contract that are expressed only in imperial units.

Any imperial unit of measure in the contract documents with an accompanying expression in a metric unit shall be referred to hereinafter as a “dual unit” measurement. Such a “dual unit” measurement is typically expressed first in the imperial unit followed immediately to the right by the metric unit in parenthesis “()” or brackets “[]” where parenthesis is used in the sentence to convey other information. Where “dual units” of measure appear in this project, only the metric units shall apply. The imperial unit shown is not to be considered interchangeable and mathematically convertible to the metric unit and shall not be used as an alternate or conflicting measurement.

If conflicting measurements of the same item appear in two separate places in the Contract with one measurement being a solitary metric unit measurement expressed only as a “single unit” or as the second part of a “dual unit” (imperial/metric) measurement and, the conflicting measurement is a metric unit measurement converted from an imperial unit measurement using this Supplemental Specification; the metric unit measurement expressed as a “single unit” or as part of a “dual unit” shall apply.

Any obvious or apparent error or omission shall be corrected in accordance with the requirements of Section 105.12 of the Specifications.

The conversion methods herein shall apply to the following:

- The *Virginia Department of Transportation Road and Bridge Specifications* book, dated 2007; and its accompanying revisions including all Supplemental Specifications, Special Provisions, and Special Provision Copied Notes in the Contract.
- The *Virginia Department of Transportation Road and Bridge Standards*, dated 2008; and its accompanying revisions including all Standard sheets and Special Design drawings.
- The *Virginia Work Area Protection Manual*, dated May 1, 2005.
- Other contract documents included in the Contract containing any use of imperial units of measure without an accompanying metric unit of measure.

The conversions herein shall not apply to the following:

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- That portion of any Supplemental Specification, Special Provision, Special Provision Copied Note, Standard sheet, Special Design drawing or other contract document included in the Contract where only a metric unit of measure is used.
- That portion of any Supplemental Specification, Special Provision, Special Provision Copied Note, Standard sheet, Special Design drawing or other contract document included in the Contract where a "dual unit" (imperial/metric) measurement is used.
- The plans, as defined in Section 101.02 of the Specifications. Such plans are expressed only in metric units for this project.
- The "Schedule of Items" in the Contract. The quantities and units of measure of such items in the "Schedule of Items" are expressed only in metric units for this project.

II. IMPERIAL UNIT TO METRIC UNIT CONVERSION

The table herein was developed as a tool for the specific purpose of converting measurements and units in the Contract expressed only as imperial units into the metric units required for this project. Such conversions shall only apply to those measurements and units specifically designated in the requirements of Section I of this special provision.

The units of measure, terms and abbreviations used in the table herein do not represent every conceivable imperial or metric unit of measure, term and abbreviation. Such used in the table herein represents what typically appear in a broad range of Department projects. The Contractor or Engineer may discover an imperial unit of measure, term and abbreviation in the Contract requiring conversion to metric in accordance with the requirements of Section I of this special provision that is not included in the table herein. If such occurs the Contractor shall submit to the Engineer for his/her approval the method of conversion and its source, the metric unit and resulting measurement.

Rounding of converted measurements shall be performed in a manner that establishes metric unit measurements that best reflect the intent of the measurements originally expressed in imperial units.

When nominal imperial unit measurements, such as pipe or aggregate sizes, are converted; the resulting measurement shall be for the purpose of clearly identifying the corresponding nominal metric unit measurements for that item.

Any obvious or apparent error or omission in converting the units of measure from imperial to metric in accordance with the requirements of the table herein shall be corrected in accordance with the requirements of Section 105.12 of the Specifications.

Converting the units of measure from imperial to metric in accordance with the requirements herein and of Section I of this special provision shall be performed in accordance with the follow table:

TABLE OF IMPERIAL UNIT TO METRIC UNIT CONVERSION FORMULAS

FROM IMPERIAL UNIT (<u>IU</u>)	FORMULA	TO METRIC UNIT (<u>MU</u>)
DISTANCE	=====	DISTANCE
<u>Linear foot</u> , ft	<u>IU</u> x .3048 = <u>MU</u>	<u>Meter</u> , m

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FROM IMPERIAL UNIT (<u>IU</u>)	FORMULA	TO METRIC UNIT (<u>MU</u>)
<u>Inch</u> , in	$IU \times 25.4 = MU$	<u>Millimeter</u> , mm
<u>Microinches</u>	$IU \times .0254 = MU$	<u>Micrometer</u> , μm
<u>Microinches</u>	$IU \times 0.0000254 = MU$	<u>Millimeter</u> , mm
<u>Mile</u> , mi (U.S. Statute)	$IU \times 1.60934 = MU$	<u>Kilometer</u> , km
<u>Station</u> (100 feet)	$IU \times .3048 = MU$	<u>Station</u> (100 meters)
<u>Yard</u> , yd	$IU \times 0.9144 = MU$	<u>Meter</u> , m
DISTANCE (THICKNESS)	=====	DISTANCE (THICKNESS)
<u>Mil</u> (.001 inch)	$IU \times .0000254 = MU$	<u>Meter</u> , m
<u>Mil</u> (.001 inch)	$IU \times 0.0254 = MU$	<u>Millimeter</u> , mm
<u>Mil</u> (.001 inch)	$IU \times 25.4 = MU$	<u>Micrometer</u> , <u>Micron</u> (.000001 meter), μm
SLOPE RATE	=====	SLOPE RATE
<u>Inch per foot</u> , in/ft	$IU \times 25.4 \times 3.2808399 = MU$	<u>Millimeters per meter</u> , mm/m
SLOPE RATE (AVERAGE)	=====	SLOPE RATE (AVERAGE)
<u>Inches per mile</u> International Roughness Index (IRI)	$IU \times 25.4 \times 0.62137 = MU$	<u>Millimeters per Kilometer</u> , mm/km International Roughness Index (IRI)
AREA	=====	AREA
<u>Acre</u> , ac	$IU \times 0.4046873 = MU$	<u>Hectare</u> , ha
<u>Square foot</u> , ft ²	$IU \times 92903.04 = MU$	<u>Square millimeter</u> , mm ²
<u>Square foot</u> , ft ²	$IU \times .092903 = MU$	<u>Square meter</u> , m ²
<u>Square inch</u> , in ²	$IU \times 6.4516 = MU$	<u>Square centimeter</u> , cm ²
<u>Square mile</u> , mi ²	$IU \times 2.589988 = MU$	<u>Square kilometer</u> , km ²
<u>Square yard</u> , yd ²	$IU \times 0.8361274 = MU$	<u>Square meter</u> , m ²
<u>Square yard</u> , yd ²	$IU \times 8361.274 = MU$	<u>Square centimeter</u> , cm ²
<u>Unit</u> (1,000 square feet)	$IU \times 1.07639 = MU$	<u>Unit</u> (100 square meters)
<u>Unit</u> (100 square feet)	$IU \times 1 = MU$	<u>Unit</u> (9.2 square meters)
<u>Unit</u> (100 square feet)	$IU \times 1.07639 = MU$	<u>Unit</u> (10 square meters)
<u>Board-foot</u>	$IU \times 0.002359737 = MU$	<u>Cubic meter</u> , m ³
1,000 foot-board-measure, MFBM	$IU \times 2.359737 = MU$	<u>Cubic meter</u> , m ³
VOLUME	=====	VOLUME
<u>Cubic foot</u> , ft ³	$IU \times 0.02831685 = MU$	<u>Cubic meter</u> , m ³
<u>Cubic Inch</u> , in ³	$IU \times 16.38706 = MU$	<u>Cubic centimeter</u> , cm ³

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FROM IMPERIAL UNIT (<u>IU</u>)	FORMULA	TO METRIC UNIT (<u>MU</u>)
<u>Cubic yard</u> , yd ³	<u>IU</u> x 0.7645549 = <u>MU</u>	<u>Cubic meter</u> , m ³
VOLUME (U.S. LIQUID)	=====	VOLUME (LIQUID)
<u>Fluid ounce</u> , fl oz	<u>IU</u> x 29.57353 = <u>MU</u>	<u>Milliliter</u> , ml
<u>Gallon</u> , gal	<u>IU</u> x 3.7854 = <u>MU</u>	<u>Liter</u> , l
<u>Ounce</u> , oz	<u>IU</u> x 29.57353 = <u>MU</u>	<u>Milliliter</u> , ml
<u>Pint</u> , pt	<u>IU</u> x 0.47318 = <u>MU</u>	<u>Liter</u> , l
<u>Pint</u> , pt	<u>IU</u> x 473.1765 = <u>MU</u>	<u>Milliliter</u> , ml
<u>Quart</u> , qt	<u>IU</u> x 0.94635 = <u>MU</u>	<u>Liter</u> , l
<u>Unit</u> (1,000 gallons)	<u>IU</u> x 1 = <u>MU</u>	<u>Unit</u> (3,785 liters)
MASS (WEIGHT)	=====	MASS
<u>Ounce</u> , oz	<u>IU</u> x 28.34952 = <u>MU</u>	<u>Gram</u> , g
<u>Ounce</u> , oz	<u>IU</u> x 0.02834952 = <u>MU</u>	<u>Kilogram</u> , kg
<u>Pound</u> , lb	<u>IU</u> x 0.45359 = <u>MU</u>	<u>Kilogram</u> , kg
<u>Ton</u> (Short=2000 lbs)	<u>IU</u> x 0.9071847 = <u>MU</u>	<u>Metric ton</u>
<u>Ton</u> (Short=2000 lbs)	<u>IU</u> x 907.1847 = <u>MU</u>	<u>Kilogram</u> , kg
<u>Tonnage</u>	<u>IU</u> x 0.9071847 = <u>MU</u>	<u>Metric tonnage</u>
<u>Weight</u>	Equivalent Terms	<u>Mass</u>
MASS (APPLIED RATE)	=====	MASS (APPLIED RATE)
<u>Pounds per linear foot</u> , lb/ft	<u>IU</u> x 0.45359 x 3.2808399 = <u>MU</u>	<u>Kilograms per meter</u> , kg/m
<u>Pounds per linear foot</u> , lb/ft	<u>IU</u> x 453.5924 x 3.28084 = <u>MU</u>	<u>Grams per meter</u> , g/m
<u>Tons per inch</u>	<u>IU</u> x 907.1847 x .03937 = <u>MU</u>	<u>Kilograms per millimeter</u> , kg/mm
DENSITY	=====	DENSITY
<u>Pounds per cubic foot</u> , lb/ft ³	<u>IU</u> x 0.45359 x 35.314662 = <u>MU</u>	<u>Kilograms per cubic meter</u> , kg/m ³
<u>Pounds per cubic yard</u> , lb/yd ³	<u>IU</u> x 0.45359 x 1.3079505 = <u>MU</u>	<u>Kilograms per cubic meter</u> , kg/m ³
<u>Pounds per gallon</u> , lb/gal	<u>IU</u> x 453.5924 x 0.264172 = <u>MU</u>	<u>Grams per liter</u> , g/l
<u>Pounds per gallon</u> , lb/gal	<u>IU</u> x 0.45359 x 0.264172 = <u>MU</u>	<u>Kilograms per liter</u> , kg/l
<u>Pounds per gallon</u> , lb/gal	<u>IU</u> x 0.45359 x .264172 = <u>MU</u>	<u>Kilograms per liter</u> , kg/l
FORCE	=====	FORCE
<u>Kip</u> (1000 pound-force, lbf)	<u>IU</u> x 4.448222 = <u>MU</u>	<u>Kilonewton</u> , kN
<u>Pound</u> , lbf	<u>IU</u> x 4.448222 = <u>MU</u>	<u>Newton</u> , N
<u>Pound</u> , lbf	<u>IU</u> x 0.004448222 = <u>MU</u>	<u>Kilonewton</u> , kN

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FROM IMPERIAL UNIT (<u>IU</u>)	FORMULA	TO METRIC UNIT (<u>MU</u>)
<u>Poundal</u>	$\text{IU} \times 0.1382550 = \text{MU}$	<u>Newton</u> , N
<u>Pounds per inch</u> , lb/in	$\text{IU} \times 0.00445 \times 39.37008 = \text{MU}$	<u>Kilonewtons per meter</u> , kN/m
<u>Pounds per linear foot</u> , lb/lf	$\text{IU} \times 0.0044482 \times 3.28084 = \text{MU}$	<u>Kilonewtons per meter</u> , kN/m
<u>Ton</u> (2000 pound-force, lbf)	$\text{IU} \times 8896.444 = \text{MU}$	<u>Newton</u> , N
PRESSURE	=====	PRESSURE
<u>Ounces per square foot</u> , oz/ft ²	$\text{IU} \times 28.34952 \times 10.76391 = \text{MU}$	<u>Grams per square meter</u> , g/m ²
<u>Ounces per square yard</u> , oz/yd ²	$\text{IU} \times 0.028349 \times 1.19599 = \text{MU}$	<u>Kilograms per square meter</u> , kg/m ²
<u>Pounds per square foot</u> , lb/ft ²	$\text{IU} \times 4.882428 \times 10.7639 = \text{MU}$	<u>Kilograms per square meter</u> , kg/m ²
<u>Pounds per square inch</u> , lb/in ²	$\text{IU} \times 0.006894757 = \text{MU}$	<u>Megapascals</u> , MPa
<u>Pounds per square inch</u> , lb/in ²	$\text{IU} \times 6.894757 = \text{MU}$	<u>Kilopascals</u> , kPa
<u>Pounds per square yard</u> , lb/yd ²	$\text{IU} \times 0.0004536 \times 11959.9 = \text{MU}$	<u>Metric tons per hectare</u>
<u>Pounds per square yard</u> , lb/yd ²	$\text{IU} \times 0.45359 = \text{MU}$	<u>Kilograms per square meter</u> , kg/m ²
WORK	=====	WORK
<u>Foot poundal</u>	$\text{IU} \times 0.04214011 = \text{MU}$	<u>Joule</u> (J)
<u>Foot-pound</u> , ft-lbf	$\text{IU} \times 0.3048 \times 4.448222 = \text{MU}$	<u>Newtonmeters</u> , Nm
<u>Foot-pound</u> , ft-lbf	$\text{IU} \times 1.355818 = \text{MU}$	<u>Joule</u> (J)
<u>Inch-pound</u> , in-lbf	$\text{IU} \times .08333 \times 1.355818 = \text{MU}$	<u>Joule</u> (J)
<u>Watt-hour</u> , Wh	$\text{IU} \times 0.0036 = \text{MU}$	<u>Joule</u> (J)
<u>Kilowatt-hour</u> , kWh	$\text{IU} \times 0.0000036 = \text{MU}$	<u>Joule</u> (J)
WORK RATE	=====	WORK RATE
<u>Foot-pounds (25) at +10°F</u>	<u>Equivalent</u>	<u>Joules (34) at -12°C</u>
<u>Foot-pounds per inch</u> (ft-lbf/in)	$\text{IU} \times 1.355818 \times 39.37007 = \text{MU}$	<u>Joules per meter</u> , J/m
<u>Foot-pounds per inch</u> (ft-lbf/in)	$\text{IU} \times 1.355818 \times 39.37007 = \text{MU}$	<u>Newtonmeters per meter</u> , Nm/m
<u>Foot-pounds per pound</u> (ft-lbf/lbf)	$\text{IU} \times 1.355818 \times 4.448222 = \text{MU}$	<u>Joules per newton</u> , J/n
<u>Kips per foot</u>	$\text{IU} \times 4.448222 \times 3.28084 = \text{MU}$	<u>Kilonewtons per meter</u> , kN/m
<u>Kips per square inch</u>	$\text{IU} \times 4.448222 \times 0.155 = \text{MU}$	<u>Kilonewtons per square centimeter</u> , kN/cm ²
POWER	=====	POWER
<u>Foot-pound per second</u> , ft-lbf/s	$\text{IU} \times 1.355818 = \text{MU}$	<u>Joule per second</u> , J/s
<u>Watt</u> , W	$\text{IU} \times 1 = \text{MU}$	<u>Joule per second</u> , J/s
FLOW	=====	FLOW
<u>Cubic feet per second</u> , cfs	$\text{IU} \times 0.02831685 = \text{MU}$	<u>Cubic meters per Second</u> , m ³ /s

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FROM IMPERIAL UNIT (<u>IU</u>)	FORMULA	TO METRIC UNIT (<u>MU</u>)
<u>Gallons per minute, gpm</u>	$\text{IU} \times 0.0000630902 = \text{MU}$	<u>Cubic meters per Second, m³/s</u>
<u>Gallons per minute, gpm</u>	$\text{IU} \times 3.7854 \times 0.016667 = \text{MU}$	<u>Liters per second, l/s</u>
<u>Gallons per minute per foot, gpm/ft</u>	$\text{IU} \times 3.7854 \times 3.2808399 = \text{MU}$	<u>Liters per minute per meter, l/m/m</u>
FLOW (PER OPENING AREA)	=====	FLOW (PER OPENING AREA)
<u>Cubic Feet per Second per square foot, cfs/ft²</u>	$\text{IU} \times 0.02831685 \times 10.76394 = \text{MU}$	<u>Cubic meters per second per square meter, m³/s/ m²</u>
VELOCITY	=====	VELOCITY
<u>Feet per second, ft/s</u>	$\text{IU} \times .3048 = \text{MU}$	<u>Meters per second, m/s</u>
<u>Miles per hour, mph</u>	$\text{IU} \times 1.60934 = \text{MU}$	<u>Kilometers per hour, kph</u>
ACCELERATION	=====	ACCELERATION
<u>Feet per second per second, ft/s/s</u>	$\text{IU} \times .3048 = \text{MU}$	<u>Meters per second per second, m/s/s</u>
TEMPERATURE	=====	TEMPERATURE
<u>Fahrenheit, °F</u>	$(\text{IU} \text{ minus } 32) \times 0.5556 = \text{MU}$	<u>Celsius, °C</u>
COEFFICIENT OF EXPANSION		COEFFICIENT OF EXPANSION
<u>Foot per degree F, ft/°F</u>	$\text{IU} \times .3048 \times 1.8 = \text{MU}$	<u>Meters per degree C, m/°C</u>
LIGHT	=====	LIGHT
<u>Foot-candle</u>	$\text{IU} \times 10.76391 = \text{MU}$	<u>Lux, lx</u>
LIGHT (EXPOSURE RATE)	=====	LIGHT (EXPOSURE RATE)
<u>Candelas (or Candles) per foot-candle per square foot</u>	$\text{IU} \times 10.76391 \times 10.76391 = \text{MU}$	<u>Candelas (or Candles) per lux per square meter, cd/lx/m²</u>
<u>Millicandelas per square foot per foot-candle</u>	$\text{IU} \times 10.76391 \times 10.7639 = \text{MU}$	<u>Millicandelas per square meter per lux, mcd/m²/lx</u>
<u>Millicandelas (100) per square foot per foot-candle</u>	$\text{IU} \times 10.76391 \times 10.7639 = \text{MU}$	<u>Millicandelas (100) per square meter per lux, 100mcd/m²/lx</u>
STANDARD SIZES	=====	STANDARD SIZES
<u>Class A3 Concrete</u>	<u>Equivalent</u>	<u>Class 20 Concrete</u>
<u>Class A3.5 Concrete</u>	<u>Equivalent</u>	<u>Class 25 Concrete</u>
<u>Class A4 Concrete</u>	<u>Equivalent</u>	<u>Class 30 Concrete</u>
<u>Class A4.5 Concrete</u>	<u>Equivalent</u>	<u>Class 35 Concrete</u>
<u>Class A5 Concrete</u>	<u>Equivalent</u>	<u>Class 35-60 by 5's Concrete</u>
<u>Class B2 Concrete</u>	<u>Equivalent</u>	<u>Class 15 Concrete</u>
<u>Class C1 Concrete</u>	<u>Equivalent</u>	<u>Class 10 Concrete</u>
<u>Class T3 Concrete</u>	<u>Equivalent</u>	<u>Class 20T Concrete</u>
<u>Gage, 06 (Gauge) (Diameter)</u>	<u>Equivalent</u>	<u>4.88 Millimeter</u>

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FROM IMPERIAL UNIT (<u>IU</u>)	FORMULA	TO METRIC UNIT (<u>MU</u>)
<u>Gage, 09 (Gauge) (Diameter)</u>	<u>Equivalent</u>	<u>3.76 Millimeter</u>
<u>Gage, 12 (Gauge) (Diameter)</u>	<u>Equivalent</u>	<u>2.67 Millimeter</u>
<u>Gage, 07 (Gauge) (Thickness)</u>	<u>Equivalent</u>	<u>4.5 Millimeter</u>
<u>Gage, 10 (Gauge) (Thickness)</u>	<u>Equivalent</u>	<u>3 Millimeter</u>
<u>Gage, 12 (Gauge) (Thickness)</u>	<u>Equivalent</u>	<u>2.8 Millimeter</u>
<u>Gage, 13 (Gauge) (Thickness)</u>	<u>Equivalent</u>	<u>2.32 Millimeter</u>
<u>Gage, 14 (Gauge) (Diameter)</u>	<u>Equivalent</u>	<u>2.0 Millimeter</u>
<u>Gage, 16 (Gauge) (Thickness)</u>	<u>Equivalent</u>	<u>1.55 Millimeter</u>
<u>Gage, 18 (Gauge) (Thickness)</u>	<u>Equivalent</u>	<u>1.3 Millimeter</u>
<u>Gage, 20 (Gauge) (Thickness)</u>	<u>Equivalent</u>	<u>0.9 Millimeter</u>
<u>Inch (Bolts)</u>	<u>Equivalent</u>	<u>See specific metric replacements</u>
<u>Sieve, 1 inch</u>	<u>Equivalent</u>	<u>Sieve, 25 millimeter</u>
<u>Sieve, 1/2 inch</u>	<u>Equivalent</u>	<u>Sieve, 12.5 millimeter</u>
<u>Sieve, 1-1/2 inch</u>	<u>Equivalent</u>	<u>Sieve, 37.5 millimeter</u>
<u>Sieve, 2 inch</u>	<u>Equivalent</u>	<u>Sieve, 50 millimeter</u>
<u>Sieve, 2-1/2 inch</u>	<u>Equivalent</u>	<u>Sieve, 63.5 millimeter</u>
<u>Sieve, 3 inch</u>	<u>Equivalent</u>	<u>Sieve, 75 millimeter</u>
<u>Sieve, 3/4 inch</u>	<u>Equivalent</u>	<u>Sieve, 19 millimeter</u>
<u>Sieve, 3/8 inch</u>	<u>Equivalent</u>	<u>Sieve, 9.5 millimeter</u>
<u>Sieve, 3-1/2 inch</u>	<u>Equivalent</u>	<u>Sieve, 90 millimeter</u>
<u>Sieve, 4 inch</u>	<u>Equivalent</u>	<u>Sieve, 100 millimeter</u>
<u>Sieve, No. 04</u>	<u>Equivalent</u>	<u>Sieve, 4.75 millimeter</u>
<u>Sieve, No. 08</u>	<u>Equivalent</u>	<u>Sieve, 2.36 millimeter</u>
<u>Sieve, No. 100</u>	<u>Equivalent</u>	<u>Sieve, 150µm [aka micrometer, micron (.001mm)]</u>
<u>Sieve, No. 100</u>	<u>Equivalent</u>	<u>Sieve, 150µm [aka micrometer, micron (.001mm)]</u>
<u>Sieve, No. 16</u>	<u>Equivalent</u>	<u>Sieve, 1.18 millimeter</u>
<u>Sieve, No. 20</u>	<u>Equivalent</u>	<u>Sieve, 850µm [aka micrometer, micron (.001mm)]</u>
<u>Sieve, No. 200</u>	<u>Equivalent</u>	<u>Sieve, 75 millimeter</u>
<u>Sieve, No. 200</u>	<u>Equivalent</u>	<u>Sieve, 75µm [aka micrometer, micron (.001mm)]</u>
<u>Sieve, No. 30</u>	<u>Equivalent</u>	<u>Sieve, 600 millimeter</u>
<u>Sieve, No. 300</u>	<u>Equivalent</u>	<u>Sieve, 270µm [aka micrometer,</u>

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FROM IMPERIAL UNIT (<u>IU</u>)	FORMULA	TO METRIC UNIT (<u>MU</u>)
		micron (.001mm)]
<u>Sieve, No. 40</u>	<u>Equivalent</u>	<u>Sieve, 425µm</u> [aka micrometer, micron (.001mm)]
<u>Sieve, No. 50</u>	<u>Equivalent</u>	<u>Sieve, 300 millimeter</u>
<u>Sieve, No. 60</u>	<u>Equivalent</u>	<u>Sieve, 250µm</u> [aka micrometer, micron (.001mm)]
<u>Sieve, No.10</u>	<u>Equivalent</u>	<u>Sieve, 2.00 millimeter</u>
IMPACT STRENGTH	=====	IMPACT STRENGTH
<u>Pounds (force) per inch, lbf/in</u>	<u>IU x 4.448222 x .03937 = MU</u>	<u>Newtons per millimeter, N/mm</u>
ABSORPTION RATE	=====	ABSORPTION RATE
<u>Liters per mil</u>	<u>IU x 39.37 = MU</u>	<u>Liters per millimeter, l/mm</u>
APPLICATION RATES	=====	APPLICATION RATES
<u>Gallons per cubic yard, gal/yd³</u>	<u>IU x 3.7854 x 0.764555 = MU</u>	<u>Liters per cubic meter, l/m³</u>
<u>Gallons per square foot, gal/ft²</u>	<u>IU x 3.7854 x 10.76391 = MU</u>	<u>Liters per square meter, l/m²</u>
<u>Gallons per square yard, gal/yd²</u>	<u>IU x 3.7854 x 1.19598999 = MU</u>	<u>Liters per square meter, l/m²</u>
<u>Gallons per ton</u>	<u>IU x 3.7854 x 0.9071847 = MU</u>	<u>Liters per metric ton</u>
<u>Inch per second per 0.1 inch</u>	<u>IU x 25.4 x 393.7007 = MU</u>	<u>Millimeters per second per meter, mm/s/m</u>
<u>Pounds per 100 square foot</u>	<u>IU x 0.45359 x 1 = MU</u>	<u>Kilograms per 9.29 square meters</u>
<u>Pounds per acre, lb/ac</u>	<u>IU x 0.45359 x 2.47104 = MU</u>	<u>Kilograms per hectare, kg/ha</u>
<u>Pounds per square foot per hour, lb/ft²/h</u>	<u>IU x 4.88243 x 10.76391 = MU</u>	<u>Kilograms per square meter per hour, kg/m²/h</u>
<u>Pounds per square yard per inch, lb/yd²/in</u>	<u>IU x 0.45359 x 0.8361274 = MU</u>	<u>Kilograms per square meter (25-millimeter nominal application rate)</u>
<u>Pounds per square yard per inch, lb/yd²/in</u>	<u>IU x 0.4536 x 0.8361 x 0.03937 = MU</u>	<u>Kilograms per square meter per millimeter, kg/m²/mm</u>
<u>Square foot per gallon, ft²/gal</u>	<u>IU x 0.092903 x 0.264172 = MU</u>	<u>Square meters per liter, m²/l</u>
<u>Tons per acre</u>	<u>IU x 0.9071847 x 2.47104 = MU</u>	<u>Metric tons per hectare</u>

III. SPECIFIC METRIC REPLACEMENTS

The *Virginia Department of Transportation Road and Bridge Specifications* book, dated 2007; its accompanying revisions including all Supplemental Specifications, Special Provisions, and Special Provision Copied Notes; the *Virginia Department of Transportation Road and Bridge Standards*, dated 2008; its accompanying revisions including all Standard sheets and Special Design drawings; the *Virginia Work Area Protection Manual*, dated May 1, 2005; and other contract documents included in the Contract contain specific elements such as tables, nomographs and forms that, as they appear in

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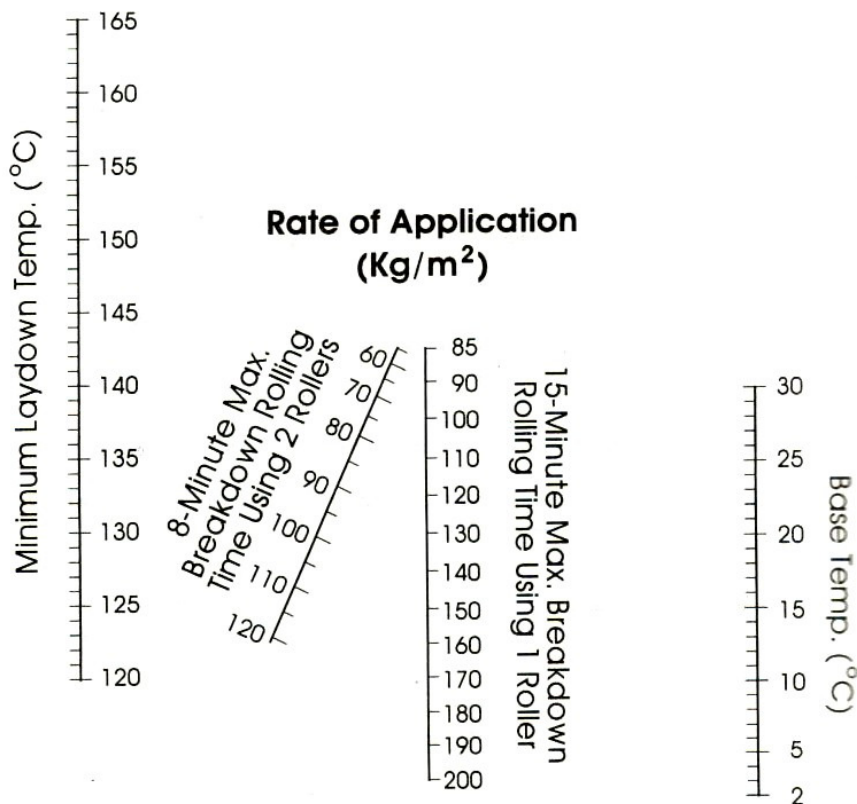
those imperial-only unit documents, are difficult to convert to metric units using only a conversion method. The following are metric unit replacements for specific imperial units in this Contract:

A. The VIRGINIA DEPARTMENT OF TRANSPORTATION ROAD AND BRIDGE SPECIFICATIONS book, dated 2007

Table III-2, Cold Weather Paving Limitations

The imperial-only unit nomograph titled “Table III-2, Cold Weather Paving Limitations” in the *Virginia Department of Transportation Road and Bridge Specifications* book, dated 2007 is replaced with the following:

**TABLE III-2
Cold Weather Paving Limitations
Asphalt Concrete Paving Limitations**



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Section 226.02(h) High-Strength Bolts in the 2007 Road and Bridge Specifications book

Section 226.02(h)b. and **Section 226.02(h)c.** of the Specifications are replaced with the following:

- b. During this test, the minimum recorded tension shall be at least 1.15 times the required bolt proof load as specified in ASTM A325 and A490:

1.15 x Proof Load (kN)		
Bolt Size	325	A490
M16x2	108.3	149
M20x2.5	169	233
M22x2.5	209	288
M24x3	244	337
M27x3	316	438
M30x3.5	387	536
M36x4	563	780

- c. The measured torque to produce the required fastener tension shall not exceed the value obtained by the following equation:

$$\text{Torque} = 0.25 PD$$

Where:

Torque = measured torque (newtonmeters)

P = measured bolt tension (newtons)

D = nominal diameter (meters).

Max. Torque 1.15 x Proof Load (Nm)		
Bolt Size	A325	A490
M16x2	430	600
M20x2.5	850	1170
M22x2.5	1150	1580
M24x3	1460	2020
M27x3	2130	2960
M30x3.5	2900	4020
M36x4	5070	7020

B. Supplemental Specifications, Special Provisions, Special Provision Copied Notes**Special provision for "Wave Equation Analysis"**

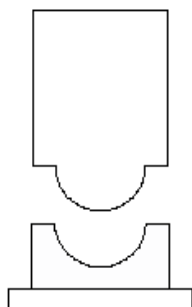
The form titled "**Pile and Driving Equipment Data Form**" in the Special Provision for **Wave Equation Analysis** is replaced with the following:

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Attachment 1

VIRGINIA DEPARTMENT OF TRANSPORTATION PILE AND DRIVING EQUIPMENT DATA FORM

Project: _____
 Pile Driving Contractor Or Subcontractor (Driven by): _____



HAMMER Manufacture: _____ Model: _____
 Type: _____
 Rated Energy: _____ @ _____ Length of Stroke
 Modifications: _____

RAM Ram Mass: _____

ANVIL OR BASE Mass: _____

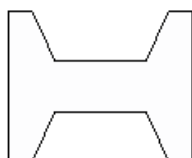
STRIKER PLATE Material: _____
 Thickness: _____ Area: _____
 Modulus of Elasticity - E: _____ (kpa)
 Coefficient of Restitution: _____



CAP BLOCK Material: _____
 Thickness: _____ Area: _____
 Modulus of Elasticity - E: _____ (kpa)
 Coefficient of Restitution: _____



PILE CAP Helmet _____ Mass: _____
 Bonnet _____ Materials: _____
 Anvil Block _____
 Remarks: _____
 Drive head _____
 Accessories _____



CUSHION Cushion Material: _____
 Thickness: _____ Area: _____
 Modulus of Elasticity - E: _____ (kpa)
 Coefficient of Restitution: _____



PILE Type: _____
 Pile Size: _____ Length: _____ Diameter: _____
 Cross Sectional Area: _____
 Material: _____ Mass/m: _____
 Design Pile Capacity: _____ metric tons
 Description of Splice: _____

Tip Treatment Description: _____

Remarks: _____

Submitted By: _____ Date: _____
 Company: _____ Phone: _____

Cc: District Bridge Engineer
 State Bridge Engineer
 Construction Manager

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C. The Virginia Department of Transportation Road and Bridge Standards, dated 2008**Appendix A-2. Standard Reinforcing Bars**

Where imperial units are used in the Contract to specify **Standard Reinforcing Bars**, the following conversion chart shall apply:

STANDARD REINFORCING BARS								
IMPERIAL					METRIC			
Bar Size Designation	Diameter (in)	Area (in ²)	Weight (lb/ft)		Bar Size Designation	Diameter (mm)	Area (mm ²)	Mass (kg/m)
#3	0.375	0.11	0.376		#10	9.5	71	0.56
#4	0.5	0.2	0.668		#13	12.7	129	0.994
#5	0.625	0.31	1.043		#16	15.9	199	1.552
#6	0.75	0.44	1.502		#19	19.1	284	2.235
#7	0.875	0.6	2.044		#22	22.2	387	3.042
#8	1	0.79	2.67		#25	25.4	510	3.973
#9	1.128	1	3.4		#29	28.7	645	5.06
#10	1.27	1.27	4.303		#32	32.3	819	6.404
#11	1.41	1.56	5.313		#36	35.8	1006	7.907
#14	1.693	2.25	7.65		#43	43	1452	11.38
#18	2.257	4	13.6		#57	57.3	2581	20.24

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UPDATED February 25, 2010

Today's Date: March 2, 2010